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Методичні вказівки
для читання з дисципліни “Англійська мова”
для студентів спеціальності “Дизайн”

Частина I

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ЗАГАЛЬНІ ПОЛОЖЕННЯ

Дані методичні вказівки призначені для розвитку навичок читання студентів гуманітарного факультету спеціальності "Дизайн" денної форми навчання на I та II етапі навчання.

UNIT I DWELLINGS

Task 1. Read the words given below. Memorize them.

Dwelling-Places and Their Parts

estate – ділянка, район
 semidetached house – одноквартирний будинок, який має спільну стіну із сусіднім будинком
 lodgings – квартира, оселя
 block of flats – багатоповерховий будинок
 garage – гараж
 larder - комора
 lavatory - туалет
 fireplace - камін
 stove - плита
 fridge - холодильник
 sink - раковина
 bed-sitter-cum-study – спальня-вітальня-кабінет

Decoration and Appliances

household – господарство, хазяйство
 living space – життєвий простір, корисна площа
 bare necessities – предмети першої потреби
 central heating – центральне опалення
 installed - установлений
 built-in - вмонтований
 double-glazed – з подвійними шибками
 wallpapered – поклеєний шпалерами

Furniture

broom cupboard – шафа для віника
 wardrobe – гардероб, шафа

double bed – двоспальна кровать
 dressing table – туалетный столик
 settee – диван, канапа

Task 2. Make up your own list of words under the same headings.

Task 3. Read the passage from John Braine's "Room at the Top" and then discuss the points given below.

The First Room of My Own

My room at Mrs. Thomson's was the first room of my own. I don't count my room at my aunt Emily's. It was strictly a bedroom. To my aunt a bedroom was a room with a bed and a wardrobe and a chair, and its purpose was sleep. You read, wrote and talked in the living room. Neither my uncle nor my aunt understood my desire for privacy. There was no electric fire in my room.

Now I was moving into a different world. I looked at my room with delight: wallpaper vertically stripped in beige and silver, a bay window with fitted cushions along it, a divan bed, two arm chairs and a dressing table and writing table - all in the same color. On the cream-painted bookcase was a bowl of freesias and whereas a fire burning in the fireplace, leaving an aromatic smell.

Compare Joe's room at his aunt's and at Mrs. Thomson's.

Compare a typical Ukrainian living room with a typical English living room (point out the differences).

Tell us about the first room of your own.

Why is privacy important?

How would you finish a room of your own? A two-room flat? A four-room flat? With modern or antique furniture?

What color scheme would you choose for your living room (bedroom, study)?

	Light, dark
--	-------------

furniture	
Walls	Beige, wallpapered
Lamp shade	Pink, red
Carpets	Red, green, dark blue
Curtains	White, muslin, tulle
Covers	Plain, with a floral design, bright colour

What things make a room look cosy (a lot of knick-knacks, candlelight, bright floor mats, a nice mirror, a still life, a lot of cushions, a nice standard lamp, a bowl of flowers, ...)?

What's your idea of pleasant, comfortable living?

Fair-sized rooms or small cosy rooms with little furniture?

An all-electric kitchen or a kitchenette?

A large balcony or windows looking out on the park?

Living in a quiet street on the outskirts of the town or living in an old-fashioned house in the center?

Having an open fireplace or an electric fire?

Shopping facilities close by or sports facilities (heated swimming pools, gyms, tennis courts)?

Points to consider when changing flats:

number of rooms,

the size of rooms,

living space,

type of heating (gas, electric stove, oil heating, central heating),

fixtures (built-in cupboard, light fitting, telephone),

which floor (ground floor, basement, attic),

light, sunshine,

noise,

windows looking out on,

balcony,

lift,

cellar,

laundry,

...

Task 4. Read the text.

How We Live

"Cosy Nook"
10 Park Avenue
Kingston
Surrey
3rd July 1985

"Mr. and Mrs. Dean Burton take pleasure in inviting you to their house-warming party on Tuesday next, 9th July at 7 p.m."

Last week Jane received this invitation from a former school friend who had been her roommate in lodgings in their student days. Having also known Mrs. Burton – as just Eileen – when she lived in a block of flats in the center of the town, she was interested to see how these newlyweds were now living in their brand-new house with a garage.

It was just one of those typical suburban semidetached houses, set in a small garden, with a front room, a back room and a kitchen downstairs, also a tiny larder and a broom cupboard under the stairs. Then upstairs there was one fair-sized bedroom, two smaller ones and a bathroom and lavatory. The house was similar to dozens of other houses on this new estate, where the only advance over the same houses built some fifty years ago was that now at least central heating was installed and the windows were double-glazed. Yes, this nation of Spartans is now becoming aware of the advantages of modern comfort even though they are used to their open fireplaces and chilly bedrooms.

So the Burtons' house did not really need warming up literally but the party, with every guest bringing something to add to the household, certainly helped to make the Burtons' place a "Cosy Nook". For so far the Burtons had only bought the bare necessities: wall-to-wall carpets and the most essential pieces of furniture. The pink vase Jane brought immediately made the wall unit in the living room look more personal. The back room, a dining room, containing just a table, four chairs and a sideboard, also looked more like a display in a shop until Gerald arrived with one of his landscapes: it gave the room real character. The kitchen needed no finishing touches, as the sink, stove, fridge and kitchen cupboards were all built-in.

Upstairs, though, the master bedroom, wallpapered in a rather loud floral design, had only a double bed and a dressing table with a stool.

The second bedroom had built-in wardrobes but was empty otherwise-and the children's room also awaited furnishing.

They all admired the Burtons' home and everybody was full of helpful advice about the colour schemes for curtains and covers, how to rearrange the settee and the armchairs to create more living space, how to turn the conventional bedroom into a bed-sitter-cum-study, and as the party continued the bright ideas began to be put into practice.

Task 5. Choose the right word or word combination. Explain the difference between the given alternatives.

1. Jane ... *a) got, b) obtained, c) received* this invitation from a ... *a) previous, b) earlier, c) former* friend.

2. They lived in ... *a) a block of flats, b) a block house, c) an apartment house* in the center of the town.

3. It was one of those typical ... *a) thatched, b) attached, c) semidetached* houses.

4. There was also a ... *a) very small, b) minute, c) tiny* larder under the ... *a) steps, b) staircase, c) stairs*.

5. There was one ... *a) spacious, b) fair-sized, c) fairly large* bedroom upstairs.

6. The house ... *a) was similar, b) looked like, c) resembled* dozens of other houses on this new estate.

7. ... *a) so long, b) so far, c) as yet* the Burtons have only bought the most ... *a) substantial, b) vital, c) essential* pieces of furniture.

8. The dining room furniture ... *a) seemed, b) looked c) appeared* more like a(n) *a) display, b) showcase, c) exhibition* in a shop.

9. The second bedroom was ... *a) empty, b) vacant, c) unoccupied*.

10. As the party ... *a) continued, b) went on, c) kept on* the bright ideas began to be *a) realized, b) put into practice, c) put into effect*.

Task 6. Give the opposites

1. an empty room; 2. the back room; 3. a small bedroom; 4. a dark room; 5. a very large bathroom; 6. outdated furniture; 7. the most unnecessary piece of furniture; 8. single windows; 9. a plain design; 10. an

attractive room; 11. light furniture; 12. a very old house; 13. a large garden; 14. the back garden; 15. dull colours; 16. the former roommate; 17. plenty of living space; 18. a high ceiling; 19. to buy for ready money; 20. upstairs; 21. under the desk; 22. uninteresting ideas; 23. the hostess; 24. move out; 25. a warm bedroom.

Task 7. Find the odd man out

- a) flat - rooms - lodgings - larder - block of flats
- b) sideboard - broom - china cabinet - cupboard - bookcase
- c) study - cellar - living room - dining room - drawing room
- d) ground floor – attics - basement - stairs – backyard

Task 8. Choose the appropriate adjective. Mind the difference:

convenient - handy, serving to avoid trouble or difficulty

suitable - right for the purpose or occasion

1. John lives near his place of work, which is very
2. The central heating is very ... and the four rooms are just ... for a three-member family.
3. Old, bulky furniture isn't ... for small modern flats.
4. The bathroom's fitted with ... equipment for developing photographs.
5. We thought the orange curtains with rod spots were hardly ... for the sedately furnished room.
6. The architect didn't realize it's ... to have the larder next to the kitchen.
7. Our prefabricated flat is ... from the point of view of upkeep.
8. It's more ... for the young people to live on their own.
9. On the other hand when grandma baby-sat for them they bought living together was quite
10. The shopping center and other amenities nearby are extremely ... for a working mother.
11. It's very ... to have the doctor living near us.
12. Why didn't they find a more ... place for their house?

UNIT II PAINTING

Task 1. Study the vocabulary. Make up your own sentences with them.

- oil painting - живопис масляними красками
- a painting depicts, portrays, shows — картина зображує, представляє
- Two hobbies she really enjoyed, painting and gardening. — У неї було два заняття, котрі їй дійсно подобались: малювання и садівництво.
- to restore a painting — реставрувати картину
- to authenticate a painting — установити оригінальність картини

Task 2. Study the glossary below. Translate into Ukrainian.

Painting - Works of art made with paint on a surface.

Sketch - A quick drawing that loosely captures the appearance or action of a place or situation. Sketches are often done in preparation for larger, more detailed works of art. *Lion* by Peter Paul Rubens (Flemish, 1577-1640) was done in preparation for his painting of *Daniel in the Lions' Den*.

A sculptural sketch too is a quickly or loosely produced sculpture, typically made in working out ideas which the sculptor might later execute with more detail or in more expensive or more time-demanding materials.

Study - A preparatory drawing, related to a sketch.

Drawing - art of the draftsman. In its broadest sense it includes every use of the delineated line and is thus basic to the arts of painting, architecture, sculpture, calligraphy, and geometry. The word drawing is commonly used to denote works in pen, pencil, crayon, chalk, charcoal, or similar media in which form rather than colour is emphasized. For centuries drawings have been made either as preparatory studies or as finished works of art.

Preparatory drawings **sometimes** reveal a vigour and spontaneity lacking in the completed work. Among the many artists acclaimed for their drawings are Leonardo da Vinci, Michelangelo, Rubens, Hogarth, Goya, Daumier, Klee, Picasso, and Matisse. Drawings are often used as illustrations and are reproduced by such processes as etching, engraving, and lithography.

Gesture drawing. The act of making a sketch with relatively loose arm movements (gestures) -- with the large muscles of the arm, rather than with the small muscles of the hand and wrist of the artist. Or a drawing made this way.

Gesture drawing is both widely considered an important task in art education, and a common practice artists use in "warming up" at the start of any new work. A gesture drawing is typically the first sort of drawing done to begin a more finished drawing or painting. It is used to block in the layout of the largest shapes in a composition.

Contour drawing - Drawing in which contour lines are used to represent subject matter. A contour drawing has a three-dimensional quality, indicating the thickness as well as height and width of the forms it describes. Making a contour drawing with a continuous line is a classic drawing task (sometimes modified as a "blind continuous-line contour"): with eyes fixed on the contours of the model or object, drawing the contour very slowly with a steady, continuous line, without lifting the drawing tool or looking at the paper. There are other variations on this method

Underpainting - The layer or layers of color on a painting surface applied before the overpainting, or final coat.

There are many types of underpainting. One type is an all-over tinting of a white ground. Another is a blocked out image in diluted oil paints that serves as a guide for the painter while developing the composition and color effects.

Overpainting - A finishing layer of paint applied over another layer of paint, or underlayer, once it has dried.

Finger paint or fingerpainting - Finger paints are formulated to be applied and manipulate by the hands. This process is called fingerpainting, typically done on glossy white paper, strong, coated on both sides, and non-absorbent, having a smooth, bright surface that resists running, smearing or bleeding. Although known to be produced by artists of all ages, fingerpainting is traditionally most popular among painters at the early-childhood level.

Task 3. Make a list of words connected with the topic *Drawing*.

Task 4. Present an example of a sketch / study / drawing.

Task 5. Memorize the vocabulary. Use every word (or word combination) in the sentences of your own.

bark- кора	lustrous- глянсуватий
clay- глина	parchment- пергамент
coated paper - папір із покриттям	rag- клопоть
disperse- розповсюджуватись	remnant- залишок, відріз
to eliminate- виключати	to remove- видаляти
enamel- емаль	rosin- каніфоль, живиця
encaustic- енкаустика, живопис восковими фарбами	substance- речовина
to evaporate- випаровуватись	tempera- темпера
fiber- волокно	vehicle- розчинник, зв'язник
forerunner- провісник	versatility- різнобічний, багато-сторонній
glossy- блискучий	wash- тонкий шар
hatch- штрих	wax- віск
hazard- ризик	wood pulp- древна маса
to interlace- переплітати(сь)	to wrap- загортати
linen-льняний	yolk- жовток

Task 6. Add a negative prefix to the following words:

Effective, competent, possible, popular, permanent, furnished, balance, to approve, to like, mature, applicable, similar, use, imaginable.

Task 7. Match the following parts of the compound words:

water
semi

hatching
like

quick	gloss
cross	wax
bees	resistant
enamel	making
paper	drying

Task 8. Choose the synonymous group to the following words:

lustrous	level, even, flush, plane, flat, regular
opaque	glossy, shining, bright, radiant
involve	motion, action, activity, shift, change
smooth	cloudy, hazy, murky, turbid, dull
movement	lasting, enduring, abiding, persistent
durable	entail, require, imply, signify, mean

Task 9. Match the words with their definitions:

Conceptual art, environment art, wood, fiber, paper, plastic, lacquer, enamel, finish, art deco.

1. The term popularly used for some commercially prepared clear or pigmented varnishes derived largely from cellulose in a vehicle of fast drying solvent, available in hardware stores.
2. Art that is intended to convey an idea or a concept to the perceiver, rejecting the creation or appreciation of a traditional art object such as a painting or a sculpture as a precious commodity.
3. Refers to art which involves the creation or manipulation of a large or enclosed space, many effectively surrounding its audience.
4. Thread, yarn, or fabric, such as weaving.
5. The last coating or treatment of a surface, or the surface texture resulting from such a coating or treatment.
6. An art movement involving a mix of modern decorative art styles, largely of the 1920s and 1930s, whose main characteristics were derived from various avant-garde painting styles of the early twentieth century.

7. A plant product, fibrous material found as the primary content of the stems of such plants as trees and shrubs.
8. A mass of interlaced cellulose fibers in sheet or roll form, used as a combination ground and support in drawing, watercolor and pastel painting, and the various graphic arts techniques.
9. A vitrious, either transparent or opaque, protective or decorative coating made from silica (a kind of glass).
10. A mixture of powdered and heat-treated gypsum, which can be mixed with water, hardening to a smooth solid which does not shrink or lose volume because it hardens before all the water can evaporate.

Task 10. Choose the best alternative to complete each sentence

- 1) Silence is(gold, golden)
- 2) She fixed me with a ... stare. (glass, glassy)
- 3) There's an old ... wall at the end of the garden. (stone, stony)
- 4) It's impossible to cultivate such ... soil. (stone, stony)
- 5) Use a ... spoon if you want to stir the soup. (wood, wooden)
- 6) There's an ... staircase leading to the roof. (outside, exterior)
- 7) There's an Anglican ... in Athens. (church, temple)
- 8) Shoes are usually made of (skin, leather)
- 9) The paintings are hung in heavy gold(frames, easels)
- 10) The portrait you see here is a very good ... of my mother. (likeness, resemblance)

Task 11. Translate into English.

Малюнок - найдавніший вид образотворчого мистецтва. Первісна людина за допомогою гострого предмета робила зображення на стінах печер та знаряддях праці. З часом змінювались інструменти та основи для малювання. Перші малюнки на папірі з'явилися у XIV ст., але до XVI ст. основою для виконання малюнка були дерев'яні дощечки, пергамент.

Task 12. Read the quotations. Comment upon.

"Drawing should give the eye in the shape of a demonstration the intention and invention first conceived by its image. Line has not matter in it or any other substance, but since it is thus conditioned, it takes up no room. Contour is a surface which is neither of the body nor a part of the atmosphere, but a medium interposed between the atmosphere and the body." Leonardo (1452-1519), Italian artist, designer, etc., etc.

"When you draw lines curving around the surface, or contour, of an object, you give that object volume. You make that object appear to be popping out of the paper." Mark Kistler, American TV artist / instructor. "The Twelve Renaissance Words of Drawing in 3-D," 1997.

UNIT III

PAINTING MATERIALS

"With a single stroke, light is separated from dark, and space and scale are evoked from a void. In the beginning of all the arts lies this graphic act by pen, pencil, brush or chisel with which, and from which, all else follows."

Colin Eisler, The Seeing Hand

Task 1. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

crayon- восковий олівець

to crumble- кришитися

draftsman- кресляр

to denote- означати

to embed- управити

etching- гравюра

feel- наповнення

greasy- жирний

ground- основа

to delineate- зображувати

lack- нестача

lampblack- лампова сажа

lead- свинець

lubricant- мастило

plumbago- графіт

smudge- пляма

stump- паличка для тушування

vigour- сила, енергія

Task 2. Read the texts. Translate into Ukrainian.

Material - The substance or substances out of which something is or can be made. Examples include: clays, fibers, glass, papers, plastics, metals, pigments, stones, woods, etc. In body art the material might be the artist's body. In conceptual art there might be no material at all.

Paint - Pigment which is dispersed into a liquid, called a vehicle, which includes a binder to make it adhere both to itself and to the surface to which it is applied. Many can have a matte, semi-gloss, or glossy finish. Types of paint include tempera, watercolour, oil paint, gouache, enamel, encaustic, fresco, lacquer, acrylic, etc.

Paper - A mass of interlaced cellulose fibers in sheet or roll form, used as a combination ground and support in drawing, watercolour and pastel painting, and the various graphic arts techniques. Fine arts papers are made of pulped linen and cotton rags; while lower quality, impermanent

papers, such as newsprint, coated papers are made of wood pulp or a combination of wood pulp and cotton rag.

Writing papers contain a water-resistant substance such as rosin to prevent the spreading of ink. Kraft paper, made chemically with sulfate, is used for bags and wrapping papers because of its strength.

Crude papers were being made in China by c. 100 BCE, although a man named Tsai Lun received praise from the emperor in 105 CE for his methods of making paper from tree bark, remnant rags, and fishing nets. parchment from Roman times through the Middle Ages. The first paper mill in the Muslim world was established at Samarkand in 751 CE, two Chinese prisoners having revealed the technique of papermaking to their captors. The Moors introduced the papermaking process into Spain c. 1150. By the fifteenth century in Europe, paper mills were widely established, and paper was often used as a support for works of art, as well as for the printed books.

Task 3. Answer the questions to the texts:

What kinds of materials do you know?

What is a vehicle?

What are the components of paint?

What kinds of paint do you know?

When and where did the first paper appear?

What is the usage of various kinds of paper?

Task 4. Give the synonyms to the following words:

Completed, compressed, available, precise, subtly, to spray, to reproduce.

Task 5. Explain the difference and fill in the gaps:

Shade – shadow

- I can see your ... against the wall.
- It's very hot in the sun. Come and sit in the... .

Stuff – substance

- They use some awful waxy ... on lemons to stop them going bad.

- We had to sell so much of our ... when we moved to a smaller house.

Design – drawing

- Meril did a lovely ... of our house when she stayed here.
- We've been discussing the ... of the new house with the architect.

Crayon – chalk

- The teacher drew a map on the blackboard in coloured ...
- Annie drew this lovely picture with

Full – complete(d)

- The new hotel is now
- The hotel is The conference is taking place here.

Alike – similar – same

- We've received two ... offers.
- The two offers are
- The houses in this street are all the

Synthesis – composition

- This painting can't be genius because of its bad
- The extension to the National Gallery in London is a ... of different architectural styles.

Fantasy – imagination – originality

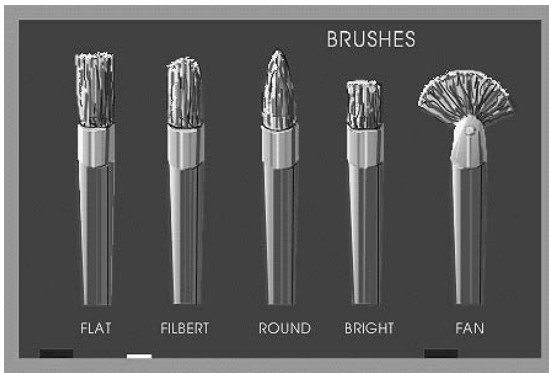
- Characters like Hamlet were the product of shakespeare's
- Stravinsky's "Rite of Spring" is a work of great
- People used to think that building a tunnel from England to France was just a

Instrument – tool

- We need some basic ... like a hammer and a screwdriver.
- A dentist's ... need to be constantly sterilized.

Task 6. Read the text. Translate into Ukrainian.

Introduction to Painting Tools



Brush Types.

Flat: is characterized by its long flat bristles. Used for long fluid strokes and can be used to create a sharp edge.

Filbert: much like the flat, but with a slightly rounded edge. This brush can create softened strokes with rounded edges.

Round: characterized by its round barrel and staggered bristle lengths. Used for long continuous lines. Makes interesting edges when rolled in the hand as the brush stroke is applied.

Bright: characterized by its short flat bristles. For controlled detailing and can be used to create sharp edges.

Fan: characterized by its fanned out flat bristles. Used for soft edges and subtle blending.

Palette Knife. This versatile tool can be used for mixing paint on the palette, for scraping off paint, and for applying paint to the canvas.

Palette. A flat piece of material that serves as a place for mixing and working with the paint before it is applied to the canvas. A pane of glass with a piece of white paper attached to the back makes a good palette. This kind of palette is versatile because it can be easily cleaned, the paper can be changed to match the color of the painting ground (for better color choices), and the surface will have no adverse effects on the paint. Palette pads, pieces of metal, and enamel surfaces can be used. It is important to have a surface that can be scraped with a razor knife for easy cleanup.

Rags. Yes, rags. They are used for cleanup and for applying paint. Rags can also be used for softened transitions when they are rubbed into painted surfaces.

Eyedropper. A tool often used in the mixing and application of small and precise amounts of liquids, such as dyes. An eyedropper can be useful in floating oil colors on water in the marbling of paper. Eyedroppers are

very inexpensive, and can be readily obtained from pharmacies. Glass eye droppers are generally preferable to plastic ones unless safety is an issue.

Support is either a tightly stretched piece of canvas or a panel. How the ground (on which paint is applied) is prepared on the support depends greatly on the type of paint to be used. Paintings are usually intended to be placed in frames, and exhibited on walls, but there have been plenty of exceptions. Also, the act of painting, which may involve a wide range of techniques and materials, along with the artist's other concerns which effect the content of a work.

Task 7. Answer the questions

Which brush is used for long fluid strokes?

What is the difference between the "Flat" and "Filbert" types of brushes?

How is "Round" brush type characterized?

What is the "Bright" brush type for?

What is characteristic of the "Fan" brush type?

Why is palette knife called "a versatile tool"?

What are the advantages of a glass palette?

Are rags used for applying paint?

What is the function of eyedroppers in painting?

Why are glass eyedroppers generally preferred to plastic ones?

Paintings are always placed in frames, aren't they?

What is support?

Task 8. Complete the table following the model

	Verb	Noun	Adjective
1	<i>create</i>	<i>creation</i>	<i>creative</i>
2	characterize		
3		effect	
4		application	
5			round
6			preferable

7			clean
8			soft

Task 9. Give the definitions of the following words:

Pen, pencil, crayon, quill, stencil, ground, ink, gum, charcoal, drawing.

Task 10. Read the texts.

Graphite - a soft black mineral substance, a form of carbon, available in powder, stick, and other forms. It has a metallic lustre and a greasy feel. Compressed with fine clay, it is used in lead pencils (though contemporary lead pencils contain no lead), lubricants, paints, and coatings, among other products. Also called black lead and plumbago.

Graphite [or, popularly, pencil] has somewhat the same appearance as metalpoint and produces a similar line, but has a richer, more lustrous texture because of its softer substance which crumbles subtly with pressure. Graphite can be soft or hard, and can produce varying degrees of blackness and grayness. Very soft graphite can be rubbed with a "stump" [usually a cylinder of rolled paper] for shading large areas; and hard graphite, sharpened to very fine point, can produce extremely precise lines.

Pastels are dry chalks made of pigment and a weak, nonwaxy binder that serves to hold the pigment particles together in the form of chalk stick. During the making of a pastel picture, the pigments are attached to the ground only because they are forced into the roughness of its surface and are there embedded. No liquid binders, such as drying oils or glue adhesives, are used during the application of the colours. Usually a very dilute liquid adhesive, called a fixative, is sprayed over the finished pastel to prevent the pigment from powdering away from the surface of the picture.

Crayons- any drawing material available in stick form. Crayon is a term that has been confused with chalk and other media. "Crayon" should be used only to refer to a stick composed of powdered pigments held together with a waxy or greasy binder. Such crayons became popular in the

nineteenth century. Crayon's advantages are the richness of its intense black, its uniform quality, and the fact that it does not smudge.

Ink - coloured fluid used for writing, drawing, or printing. Inks usually have staining power without body. The use of inks goes back in China and Egypt to at least 2500 BC. They were usually made from lampblack or a red ochre ground into a solution of glue or gums. Ink brought from China or Japan in such dry form came to be known in the West as 'Chinese ink' or 'Indian ink'. In drawing ink can be applied in fine lines with the pen or broad washes with the brush.

Task 11. Answer the questions to the texts:

- What are the main characteristics of graphite?
- What should one remember while drawing in pastels?
- What are crayon's advantages?
- How can ink be made?
-

Task 12. Read the description of different painting media. Match the words with their definitions.

Watercolor (or watercolour) Pastel Gouache Enamel

1. A vitreous, either transparent or opaque, protective or decorative coating made from silica (a kind of glass) heated in a kiln or furnace, and fused onto metal (usually copper or gold), glass, or ceramic ware. It is often applied as a paste, which solidify in firing as areas of color. Also, an object, usually very small, having such a coating.

And, a paint that dries to a hard, glossy finish, the vehicle in which is a resinous varnish. Some such paints are baked while others air-dry. Also, to coat a surface with any of these materials.

2. A heavy, opaque watercolor paint, sometimes called body color, producing a less wet-appearing and more strongly colored picture than ordinary watercolor.

3. Any paint that uses water as a medium. Paintings done with this medium are known as watercolors. An exception to this rule is water miscible oil paints, which employ water as their medium, but are actually oil paints. When made opaque with white, watercolor is generally called gouache or bodycolor. Tempera is another exception.

Task 13. Fill in the gaps with the given words.

I watched the rain as it pounded against the window ...	blend
My toothbrush is losing its ...	strokes
He dashed off the picture in a few ...	bristles
The sea and the sky seemed to ... into each other.	pane
The cuts will have an ... effect on our program.	scraped
I ... the side of my car against a wall.	adverse

Task 14. Translate the following texts into English:

Графітові олівці з'явилися у XVI ст. у зв'язку з відкриттям родовища графіта. Малюнки графітовим олівцем мають сіруватий тон з блиском, вони не бувають інтенсивно чорними.

Кольорові олівці мають товсті стрижні, до складу яких входять жирові частки. Якщо сильно надавити, то стрижні ломаються, жирний блискучий слід міцно поєднується із папіром, тому погано видаляється гумкою та слабо сприймає нанесення іншого кольору.

Як і олівець, деревне вугілля є популярним матеріалом для малюнка. М'яке вугілля добре розтирається на папірі, воно дає художнику великі можливості. Вугіллям можна провести тонкі лінії та продовжити широкі плями будь-якої форми. Цей м'який, ламкий, матеріал погано поєднується із папіром, обсипається, тому малюнки вугіллям треба фіксувати або зберігати під склом.

Гумки для витирання бувають м'якими для роботи з олівцями, вугіллям) та твердими (чорнильні). Наповнювачами для їхнього виготовлення буває мармурова пудра із додаванням рослинної олії, обробленої сірки та скла (для твердих).

Щоб зробити гумку якіснішою, її залишають на декілька днів у бензині, де вона стає м'якою. Після цього її кладуть у гарячу воду на 1-2 години, щоб видалити запах. Розм'якшувати гумку вдруге не рекомендується.

UNIT IV

PAINTING TECHNIQUES

Task 1. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

burden- тягар	marble- мармур
consideration- міркування	miniature-мініатюра
device- засіб	preliminary- підготовчий
easel-painting- станковий живопис	shade- відтінок
engraving- гравюра	to simulate- імітувати, відтворювати
equestrian- кінний	stained glass- вітражне скло
grisaille- гризайль	subsequent- подальший
to paint the picture in grisaille- писати картину в сірих або коричневих тонах	temple- храм
	underpainting- підмальовок

Task 2. Find the equivalents:

to refer	відкладати
to execute	переходити
to appear	виконувати
to work out	відноситись
to proceed	продовжувати
to postpone	виконати
to advance	з'являється

Task 3. Find the synonyms to the following words:

Preparatory, subsequent, consideration, extensively, device, to advance, to permit, purpose.

Task 4. Give the opposites to the following words:

To advance, finally, integrated, colourful, to postpone, to represent, integrated, finally.

Task 5. Complete the list below by inserting the missing forms:

Verb	Noun	Adjective
paint		
		practical
to extend		
to use		
	mixture	
		advanced

Task 6. Read the text. Give the title.

Grisaille refers to a monochrome painting and drawing technique executed in shades of grey. The term is derived from the French word gris, which means grey. Usually, grisaille pieces are created with varying mixtures of black and white pigments.

Grisaille first appeared in the late thirteenth century, but was especially popular from the second half of the fourteenth through the fifteenth century. The grisaille method was practiced by Flemish artists in the early 15th century. Such works were often produced in the Renaissance to simulate sculpture, as in Uccello's equestrian portrait of Sir John Hawkwood (Cathedral of Florence). Painters of stained glass frequently used grisaille. In the 17th century grisaille was prized for interior decoration.

Historically, artists have used grisaille painting in four different ways. First, you can use grisaille as a preliminary study for another subsequent painting. In an all black-and-white preparatory painting, you can work out all compositional considerations and tonal value relationships before proceeding to the final colour version of the painting. Second, you can also use a grisaille as the underpainting for an actual full-color work of

art. This approach, which was used extensively by the Old Masters, is a form of indirect painting.

Third, grisaille has traditionally been used as a teaching device. Many traditional art instructors require their students to master the craft of painting in the mode of grisaille before permitting them to advance to works in colour. Once again, the purpose is to postpone the added burden of colours so that students can focus their attention on the critical and demanding process of correctly modeling form. Finally, you can use areas of grisaille to represent grey objects in otherwise colourful paintings. For example, the Italian Renaissance artists often integrated areas of grisaille into their compositions to represent classical elements like marble statues and temple columns.

Task 7. Answer the questions to the text:

- What is "grisaille"?
- When did the grisaille method appeared?
- How can the artist use this painting technique?
- What is the purpose of using grisaille during studying?

Task 8. Write a summary of the text.

Task 9. Translate into English:

Гризайль - вид живопису у сірих тонах, що імітує скульптурний рельєф. Вона була розповсюджена у XIV ст.: скульптори у своїх підготовчих малюнках прагнули створити враження рельєфу. В епоху Карла V техніка гризайлі стала виключно популярною у мініатюрі, вітражі та живопису. У станковому живопису вона була характерною рисою північної школи.

У творчості Босха та Брейгеля гризайль перетворилась на живописний прийом обманку ("trom- pel'oeil"). У XVI ст. гризайль використовували у живопису по емалі..

Фламандські художники XVII ст. використовували гризайль в якості підготовчого малюнка для гравюру.

Task 10. Read the text. Translate into Ukrainian.

Painting Techniques

Sfumato - In painting, the technique of blurring or softening sharp outlines by subtle and gradual blending (feathering) of one tone into another. The smokelike haziness of this effect slightly lessens the perception that a still image is entirely still, instead lending a vague sense of movement.

It is best known in the paintings of the Italian Renaissance artists Leonardo da Vinci (1452-1519) and Correggio (Antonio Allegri) (Italian, 1489-1534).

Patina - A sheen or coloration on any surface, either unintended and produced by age or intended and produced by simulation or stimulation, which signifies the object's age; also called *aerugo*, *aes ustum*, and *verdigris*. Typically a thin layer of greens (sometimes reds or blues), usually basic copper sulfate, that forms on copper or copper alloys, such as bronze, as a result of oxidation and corrosion. Metal objects have naturally acquired patinas when long buried in soil or immersed in water. Such naturally formed patinas have come to be greatly prized. There are many formulae for the pickles and chemical treatments of metals, which may be employed to encourage the formation of patinas.

Fresco - A method of painting on plaster, either dry (dry fresco or fresco secco) or wet (wet or true fresco). In the latter method, pigments are applied to thin layers of wet plaster so that they will be absorbed and the painting becomes part of the wall

UNIT V

TYPES OF PAINTING

Part I. Watercolour Painting

Task 1. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

adhesive- зв'язуючий
body-colour- тілесний
coarse- шорсткий
dilution- розчинення
to enmesh- обплутувати
fine- дрібний
glaze- глянець, блиск
layer- шар, прошарок
medium- розчинник
to mingle- змішувати

moist- вологий
mouldy- цвілий
opaque-непрозорий
permanent -постійний
rag paper- ганчірковий папір
sketch- ескіз
solution- розчин
transparent- прозорий
watercolor, wash-drawing-
акварель

Task 2. Find the synonyms to the following words:

Aquarelle, relatively, sufficient, exactly, moist, ingredients, properties, layer, support.

Task 3. Give the opposites to the following words:

Transparent, beginner, tiny, different, uniformly, fine, balanced, to moisture, complete.

Task 4. Match the words with their definitions:

Gouache, aquarelle, pigment, tarashikomi, wetting agent, oil paint, transparent, waterproof, trois crayons.

Slow drying paint made when pigments are mixed with an oil, linseed oil being most traditional.

Typically refers to colours or other materials, which will not decay or distort with exposure to water.

A heavy, opaque watercolour paint, sometimes called body color, producing a less wet-appearing and strongly coloured picture.

Any paint that uses water as a medium.

A French term for a drawing technique requiring the monochromatic combination of red, black, and white chalk, usually on tinted paper.

Allowing light to pass through so that objects can be clearly seen on the other side; the opposite of opaque.

Finely powdered colour material which produces the colour of any medium. Made either from natural substances or synthetically.

In Japanese art, a technique involving the use of wet pigments.

A substance that reduces the surface tension of a liquid, causing the liquid to spread across or penetrate more easily the surface of a solid, making anything that is water-soluble more quickly solved.

Task 5. Give the derivatives of the following words:

Fine, flexible, adaptable, entire, solution, effect, system

Task 6. Read the text.

Transparent Watercolour. The specific term watercolour refers to paintings done on a special rag paper with pigments very finely ground in a binding medium composed of a solution of gum arabic. Watercolour paintings are done in a thin, transparent manner; pale tones are obtained by dilution of the paint with water thus producing such a thin layer of pigment that the brilliant white effect of the paper is mingled with the colour. This method of colouring generally is called the transparent or glaze system, and it is entirely different from the other colouring method called the opaque or body-colour system.

The Mechanics of Watercolour - Watercolour paints are made by grinding pigments very fine in a gum-arabic binding medium, together with certain necessary modifying ingredients. These ingredients usually are: (1) glycerin and honey [or sugar syrup], which are plasticizers added in order to keep the colours moist and to improve their working properties; (2) a preservative to keep them from becoming mouldy; and (3) a wetting agent

to make them take well and spread uniformly on the paper. The proportion of binder and pigment is very carefully balanced in order to give the paints exactly the correct properties. The tiny grains of pigment become enmeshed in the relatively coarse fibers of the paper, and this action is of much importance in holding the colour to the paper, as is the adhesive action of the gum binder. Watercolour painting consists therefore of a very thin layer of pigment particles held just sufficiently to be a permanent coating; it is not a real paint film like the layer of gouache and therefore is not subject to some of oil paint's defects, such as cracking, peeling, or blistering.

Status of Watercolour Paintings - It may be noted that watercolour and gouache are sometimes considered minor techniques when compared with oil painting. This is principally because they are used to instruct beginners and children, or because they are popular for use in making sketches and rough notes from which to paint complete pictures in oil. Actually, watercolour painting is as difficult to master as any other technique. Although its effects are more limited than those of oil, it has a distinct appeal of its own, and the process is sufficiently flexible and adaptable to a wide enough range of effects so that it qualifies as a true fine-arts medium. It occupies a serious and important place in present-day easel painting.

Many writers use the term aquarelle to distinguish transparent watercolour from other water techniques that employ opaque covering colours. Watercolour is applied in very dilute washes or glazes, usually over a white surface. It can be painted carefully and deliberately, beginning with the lightest tones, which are gradually strengthened until full intensity and depth are obtained. Alternatively it can be handled directly and freely, beginning with the elements that the painter feels are of greatest importance to a direct statement. Corrections are sometimes made by flooding an area with water, and then blotting it away, removing much of the pigment at the same time.

Task 7. Answer the questions to the text:

- What is "watercolour"?
- How are watercolour paints made?
- What does the watercolour painting consist of?
- Why do they consider gouache and watercolour to be minor technique?

- How is aquarelle applied?
- How can corrections be made?

Task 8. True or False?

- Watercolour paintings are done in a thick, opaque manner.
- The proportion of binder and pigment is not important.
- Watercolour painting consists therefore of a very thin layer of pigment particles held just sufficiently to be a permanent coating.
- Watercolour and gouache are sometimes considered major techniques when compared with oil painting.
- Corrections are sometimes made by flooding an area with oil.

Task 9. Write a summary of the text.

Task 10. Translate into English:

Живопис аквареллю, на відміну від живопису олією, є важким через прийоми роботи, а не через матеріали. Писати аквареллю починають лише після того, як оволодіють олійними фарбами.

Акварельні фарби відрізняються від олійних тим, що до їх складу входить фарбуючий пігмент скріплений рідиною, що дозволяють розводити акварель у воді.

Part II. Encaustic

Task 1. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

to be displaced- бути заміненим
 deterioration- погіршення
 distinctive- характерний,
 особливий
 linseed oil- льняна олія
 to melt- танути

moisture- вологість
 revived- відновлений
 spatula- лопатка
 varnish- лак
 resin; pitch - смола

Task 2. Give the synonyms to the following words:

Complicated, combined, resistant, damage, burnished, in short.

Task 3. Give the antonyms to the following words:

Decay, binding, to find, opacity, adaptable, permanent.

Task 4. Choose the correct definition:

1. Encaustic is

- a painting technique when the softened wax is used;
- a painting technique when the frozen wax is used;
- a painting technique when the chilled wax is used.

2. Wax is

- oily or greasy heat-sensitive substances;
- the interlacing of long, thin materials, such as yarn or thread;
- material from honeycombs;
- a white or yellow gum.

3. Varnish is

- a protective transparent finish applied in a liquid state to a surface;
- a soft, malleable, ductile, easily fusible, dull medium-gray, dense metal;
- The thin slice of a material - often of a rare and expensive material - applied, generally with an adhesive, but also (and sometimes only) with pins, to a surface of a humbler material.

4. Impasto is

- containing no matter, empty, negative space;
- a style or technique characteristic of an individual artist, period, movement, or medium;
- a technique of painting the surface when dabs are densely applied.

5. Binder is

- a punch with a hollow end used in chasing to leave dotted impressions on metal surfaces;

the ingredient in the vehicle of a paint which adheres the pigment particles to one another and to the ground;
a line diagonal to the grain of a fabric.

Task 5. Read the text. Entitle it.

The Classical Greek painting of the fourth and fifth centuries B.C. is said to have been a wax technique. Portraits made in the first century A.D. with wax paints have been found in the Fayoum district of Egypt ... They are in excellent condition today. Techniques involving the use of melted wax as a binding medium for paint were in common use until the eighth century A.D. Although they were displaced during the Middle Ages by painting methods that required less complicated equipment, the wax techniques have been revived periodically during the last century and have interested many contemporary painters because of their distinctive character and their several advantages over the other techniques....

In encaustic painting, hot melted wax, usually combined with small percentages of varnish or linseed oil, replaces the more familiar tempera or oil binders. The pigments are combined with the wax while it is in a warm liquid state. The colours are applied to the support with brushes or spatulas and harden immediately as they cool. Heat is often applied to the picture surface to remelt the wax colors so that the various layers of paint become fused to the ground. Such pictures do not darken or yellow at all with age. They remain resistant to moisture damage, decay, and many of the chemical agents that cause the deterioration of oil or tempera paintings. Surfaces in encaustic painting may be developed from highest impasto to the thinnest glaze, from matte effects to burnished brilliance, from clearest transparency to complete opacity. In short, encaustic wax technique is adaptable to a very wide range of stylistic effects and is highly permanent medium.

Task 6. Answer the questions to the text:

- What is encaustic?
- Where did this technique come from?
- What are its positive characteristics?
- Why wasn't it used during some period?
- What tools do you need in encaustic painting?

Task 7. Write a summary of the text.

Task 8. Read the text. Translate into Ukrainian.

Encaustic

The medium, technique or process of painting with molten wax (mostly beeswax), resin, and pigments that are fused after application into a continuous layer and fixed to a support with heat. This achieves a lustrous enamel appearance.

Greek artists were painting with encaustic as long ago as the 5th century BCE. The Roman historian Pliny, who wrote in the 1st century CE, tells us it was being used for the painting of portraits and scenes of mythology on panels, for the coloring of marble and terra cotta, including on architecture, and for work on ivory (probably the tinting of incised lines).

Perhaps the best known of all encaustic work are the Fayum funeral portraits painted in the 1st through 3rd centuries CE by Greek painters in Egypt. A portrait of the deceased, painted either in the prime of life or after death, was placed over the person's mummy as a memorial. These are the only surviving encaustic works from ancient times.

Over the intervening centuries, encaustic was overtaken by many other types of paint - including tempera, oil, and acrylic paints - each of which was cheaper, faster, and easier to work. Artists experimented with encaustic in the 18th and 19th centuries, but it wasn't until the 20th century that its use has really revived. Only with the availability of portable electric heating devices for the melting of the wax has the use of encaustic become sufficiently accessible. Encaustic has become so versatile indeed that many contemporary painters consider it an attractive painting medium again. Modern painters who have used encaustic include Robert Delaunay, Antoine Pevsner, Diego Rivera, and Jasper Johns.

Once applied to a surface, encaustic paint doesn't need to dry. Instead, it needs to cool. Because it cools in minutes, additional coats can be added almost immediately. Once its surface has cooled, encaustic paint presents a permanent finish, and yet the painting can be revised and reworked at any time -- whether seconds later or years later. It is a

particularly durable paint, because wax is waterproof and over time can retain all the freshness of a newly finished work.

Encaustic can be laid on in delicately thin glazes or super thick encrusted impastos. It can produce satisfying results whether applied with painstaking precision or with flamboyant spontaneity. It can be carved, shaped and molded - built to high or low relief. Its adhesiveness makes it an excellent collage medium that can be impregnated with a wide variety of other materials.

The surface quality of encaustic paint can be left roughly textured, or given a matte, semi-gloss, or glossy enamel-like finish. Encaustic painting does not require solvents of any kind. As a result, a number of health hazards are reduced or eliminated. The term "encaustic" can also refer to a painting made in this medium.

Task 9. Decide if the following statements are true or false. Correct the wrong ones.

1. For encaustic painting pigments are fixed to a support with a cooler.
2. Encaustic has recently been discovered by Italians.
3. Encaustic was followed by tempera, oil and acrylic paints.
4. Once applied to a surface, encaustic paint needs little time to cool.
5. Encaustic doesn't bear any additional working.
6. Encaustic can be laid on in either thin glazes or thick impastos.
7. The surface quality of encaustic painting should never be left roughly textured but given a glossy finish.

Task 10. Fill in the blanks with the appropriate prepositions

To achieve a better result, apply the glue ... both surfaces.	on
It is not to my taste to experiment ... hairstyle.	for
We laid the grapes ... racks to dry.	to
The speaker referred ... his notes repeatedly.	with
He fixed the lamp ... the wall with a couple of screws.	to
We use this room ... keeping all our junk in.	to

Task 11. Translate into English:

Енкаустика - восковий живопис, що виконується гарячим способом. Техніка енкаустики була створена у V ст. до н. е. у Давній Греції та стала однією з найбільш міцних та довготривалих. Розігріті фарби (віск, смоли, олія, пігмент) наносились на розігріту основу, після фарбування зверху картини знову проходили розігрітим шпателем, тоді фарби змішувались і надійно прилипали до поверхні.

Воскові фарби поступово заміщували темперою, таким чином техніку енкаустики втрачали. Сучасні художники намагаються працювати у техніці енкаустики, але до цього часу техніка ще повністю не відновлена, тому картини нашого часу дуже відрізняються від тих, що залишилися з давніх часів.

Part III. Acrylic Painting

Task 2. Read the text.

Notes on Acrylic Painting

One of the most inviting qualities of acrylic paint is its easy clean up and vivid color. Unlike oils, acrylics can also be used on paper because they do not cause decay in natural materials.

Acrylics are pigment suspended in a polymer binder, which can be dissolved in water before they dry. After the surface of the paint has begun to congeal, the areas, which are dry to the touch, are permanent and can no longer be dissolved. This drying process is much quicker than oil paint (usually an area is dry to the touch within one hour) and allows one to build up layers within a painting very quickly. Clean up tools and palette with soap and water.

Always use synthetic bristle brushes with acrylics. Nylon brushes work well. Natural bristles will draw in the moisture, which causes them to swell, then break down.

Color is something that can be frustrating to deal with in acrylic painting. The polymer binder in acrylic paint has a semi-opaque milky look before it is dry. As the paint dries the paint becomes transparent. This taints the way one sees the color. When in the liquid state, colors in acrylic paint appear to be lighter than they will be when dry. One must account for this discrepancy by visualizing how the color will appear in advance. Beginning acrylic painters should expect some trial and error as they learn how to do this.

Acrylic paint tends to be less glossy than oil. To create glazes or increase gloss one must use gel medium. Gel medium is essentially clear polymer binder that, when mixed with the paint, slows drying, creates transparency, and adds gloss to the acrylics. Soft gels and liquid gels are available to thin and allow acrylics to "flow better." Some high solid gels can even give an impasto surface to the paint.

Hint: By adding water to acrylics they can be thinned to have a more liquid consistency. This can be used to create watercolor-like washes in a painting. Be careful though, it is best to thin acrylics with gel medium because thinning with water can weaken the paint

Task 3. Answer the questions to the text:

1. What are acrylics?
2. What are the advantages of using acrylic paint?
3. Do natural brushes work well with acrylics?
4. What media can change acrylic paint?
5. Why is it best to thin acrylics with gel than with water?

Task 4. Select the word or phrase that best completes the statement or answers the questions.

Acrylics can be used on paper because the paint

is easy to clean up

has vivid color

doesn't cause decay in natural materials

The painted area which is dry to the touch

is permanent

can be quickly dissolved

do not allow painters to build up layers
 As compared with oil, acrylic paint seems to be ...
 more dull
 more shiny
 more lustrous
 Don't use ... brushes with acrylic paint.
 synthetic
 natural
 nylon
 To create glazes or increase gloss one must use ...
 gel medium
 milk
 soap

Part IV. Oil Painting

Task 1. Find the equivalents. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

subtle	призначати
resinous	ретельний
retain	за бажанням, як завгодно
meticulously	виступ, відомість
subordinate	гладкий
assign	витончений
precedence	спілкуватись
discard	утримувати, вміщувати
prominence	суміш, перехід кольорів
at will	виявляти, утворювати
fluid	правильність, пригодність
amply	переважати, домінувати
associate	відмовлятись
appropriateness	першість, предтеча
blend	достатньо, багато

predominate
bring out
fluent
facility

підлеглий, другорядний
смолистий
легкість
рідкий, плавний

Task 2. Choose the synonymous group to the following words:

universal
patronage
distinguish
influence
culmination
outstanding
subordinate

tell apart, judge, separate, divide
climax, zenith, meridian, height
power, sway, hold, control, mastery
inferior, lesser, lower, minor, junior
general, comprehensive, widespread
promotion, backing, support, defense
excellent, superb, superior, eminent

Task 3. Give the opposites to the following words:

Completely, veritable, gradual, previous, successful, irregular, importance,

Task 4. Add a negative prefix to the following words:

Practical, artistic, limited, developed, achieved, pure, importance, finished, effective, competent, possible, popular, permanent, furnished, balance, to approve, to like, mature, applicable, similar, use, imaginable.

Task 5. Read the text. Give the title.

The practice of easel painting in oil paint on canvas has been universal since the seventeenth century; it did not arise as a sudden invention but was the result of a long development. There are several milestones or turning points in the history of European easel painting which can be noted briefly as follows:

The early tempera paintings, notably those of Italy were done on gessoed grounds on wood panels. Working under the patronage of the Church or the reigning families, the artists reflected the artistic tastes of

their times. The results achieved were exactly what the painter desired; the rather limited effects and the rather intractable materials were manipulated by developing superior skill and craftsmanship rather than by adopting more fluent or easily handled materials. Giotto is an outstanding example of the early Italian painters in this tradition; the works of Boticelli and Fra Angelico exemplify the high point of technical achievement in pure egg tempera.

A subtle change then followed; as small amounts of waxy, oily, or resinous materials began to be introduced into the tempera in various ways, paintings showed a definite degree of technical change. These were characterized by a somewhat more fluent command of brushwork and a trace of softening or blending of colors, but for the most part they retained the same dry, linear quality of the earlier type. The culmination of this later type of tempera painting may be seen in the work of the Venetian painters of the fifteenth century--such as Antonello, Domenico Veneziano, and Andrea del Castagno--who refined their tempera paintings throughout with oily or resinous transparent glazes.

The artists have two instruments which they use to express their intentions in paint; they are line and colour or tonal masses. In their importance to painting techniques neither one can be rated above the other, and when discussing them the same general terms are applied to each. Two completely different technical approaches may thus be distinguished.

In the first, line predominates and the painters cited above always retained completely and meticulously their original draftsmanship. Underpainting was never entirely obscured by the final painting; its effect had a strong and direct influence on the finished work. The pictures are by no means colored drawings; they are veritable paintings, but the color or tonal element is subordinate to the linear quality.

Because of the gradual and irregular state of development of the oil-painting process and the varying requirements and conditions of schools and individuals in different localities during the fifteenth and sixteenth centuries, one cannot assign exact dates of chronological precedence to these changes.

Giovanni Bellini, who started his career by painting in the traditional tempera manner, became a user of the oily materials later in his life and produced a more blended, painterly type of work. Following the previously mentioned painters, the works of Tintoretto and Titian display all the above-mentioned characteristics brought out by the increasing use of oily

materials; although the disciplined and systematic training of the tempera painters is not wholly discarded, the influence of oil paints creates a different type of picture.

In the work of Rubens, who had a prodigious command of technical facility, we find the culmination of all the developments of Flemish and Italian techniques. Here the linear elements and tonal masses are combined and played against each other to bring one or the other into prominence at will. His paints were not of a complicated nature, differing in no major respect from our own except that they were perhaps more fluid. He is one of the most successful individuals of all time, both in setting down his exact intentions and in securing lasting, permanent results. That he was not possessed of mysterious technical secrets is amply shown by his writings and by those of his associates.

The present-day painter is guided by the experiences of the past, as to appropriateness of effects, permanence of results, and the various materials that have proved themselves by the test of time, but the artist is no longer limited or confined to any single method or technique as were the painters of the past. All the accepted methods are available, and each is appreciated as a means of creating acceptable works of art; the styles of every age and every country now have their influences on our art, and their materials and techniques as well can be applied to our own purposes.

Task 6. Answer the questions to the text:

Did oil painting arise as a sudden invention?

What influenced the artistic tastes of the early tempera paintings?

How did the tempera painting of the fifteenth century differ from the earlier technique?

Which two instruments have the artists to express their intentions in paint?

What are the features of Rubens' works?

What guides the present-day painters in their work?

Task 7. Read the text.

Notes on Oil Painting

One of the most inviting qualities of oil paint is the fact that the color remains constant throughout the drying process. When a color is mixed, unlike acrylic, it keeps the same characteristic color that is present when on the palette.

Oils allow one to make adjustments hours and days later because of its slow drying characteristics. Color in oil can easily become muddy because of this slow drying attribute when one overworks a wet surface. A drop of Cobalt Drier will speed the drying process.

Always use natural bristle brushes with oil. Synthetics do not hold the oil in the brush very well and can react with the oil.

A disadvantage of oil paint is that clean up must be done with a solvent such as mineral spirits. If you are allergic to solvents, it is possible to clean up with baby oil, then wash with soap and water. A special cloth should be used for scrubbing the spot before laundering.

One can finish an oil painting with a varnish to protect and enhance. Do not varnish an oil painting until **six months** after the paint has dried to the touch. Even though a painting has a dry surface, it is still drying below the surface. Varnishing too soon after finishing can result in cracking.

Task 8. Answer the questions:

What are the advantages of oil paint?

What are the disadvantages of oil paint?

Why can color in oil easily become muddy?

How much time does it take the paint to dry to the touch?

Task 9. Find in the text antonyms to the given adjectives:

inviting, constant, same, muddy, natural

Task 10. Translate into English:

Масляний живопис - вид живопису художніми олійними фарбами, іноді з приміненням лаків. Олійними фарбами пишуть в основному на полотні, а також на картоні, дереві, металі, вкритих спеціальними грунтами. Масляний живопис більш, ніж будь-яка інша техніка живопису, дозволяє досягти на площині зорову ілюзію об'єму та простору, різноманітних кольорових ефектів та глибини тону, виразності та динаміки.

Масляний живопис до початку 19 ст. був оснований на багаторазовому нанесенні фарб із домішкою лаків. З початку 19 ст. для масляного живопису є характерною манера накладання фарб на чистий ґрунт або на кольорову чи тональну підмальовку, лаки використовують рідше.

Окремі писемні свідчення про масляний живопис зустрічаються в античних та середньовічних манускриптах. Після вдосконалення техніки Я. ван Ейком масляний живопис стає провідним у живописі 16 ст.

Part V. Egg Tempera Painting

Task 1. Read the text.

Introduction to Egg Tempera Painting

Egg yolk creates the binder for this type of painting. The yolk of the egg contains albumen, a substance which when applied to a surface creates a strong permanent transparent layer.

The process of preparing the egg yolk for use as a painting binder has been written about in historical texts. Here is an overview of that procedure.

After breaking the egg, pour the contents from one half shell to the other allowing the egg white to fall away (an egg separator can be used here).

After most of the egg white has been removed, gently pour egg yolk, which should still be intact, into the palm of your hand.

Carefully roll the yolk from one hand to the other wiping away the excess egg white from the free hand. Have a towel handy for this part of the procedure.

Use a cloth (or paper towel) to lightly dry the exterior of the yolk.

Pinch the yolk so that you can hold it up, like a mother cat picks up a kitten, and puncture the egg yolk over a recloseable container. It is essential that no egg white or pieces of the egg sac are left in the solution.

Add dry pigment powder, which has been slightly wetted, and mix into the solution until it reaches the consistency of thin gravy. The reason the pigment should be slightly wet is to keep the powdered pigment from being breathed. **Never handle dry pigment without the use of a dust mask or respirator.** Dry pigment can be toxic if breathed.

If need be add a small amount of water to make the paint more fluid. Try not to add too much because a solution that is either too thin or too thick will result in cracking.

Close up container and repeat procedure for all colors to be used.

Egg tempera works best on a finely sanded oil-gessoed or rabbitskin glue prepared wooden panel. Masonite or plywood are good substitutes for the traditional solid wood panel used in earlier times.

When applying egg tempera, it is imperative that you work quickly. Egg tempera is extremely quick-drying. An effective technique for creating the planes of color and value is hatching and cross-hatching.

Hatching is the use of linear strokes laid closely to each other to create a value or color. Cross-hatching occurs when the strokes overlap, creating darker values and deeper color.

Task 2. Answer the questions:

What is imperative when applying egg tempera?

Is hatching or cross-hatching effective for creating the panels of color?

What is hatching?

What is cross-hatching?

Why should one use a dust mask or respirator while handling dry pigment?

Task 3. Find in the text synonyms to the given words:

albumen (*n*); entire (*n*); damp (*adj*); poisonous (*adj*); shading (*n*); efficient (*adj*)

Task 4. Express your opinion on the following quotations.

"A man paints with his brains and not with his hands." Michelangelo (1475-1564), Italian Renaissance artist.

"Only when he no longer knows what he is doing does the painter do good things." Edgar Degas (1834-1917), French Impressionist artist.

"Painting is very easy when you don't know how, but very difficult when you do." Edgar Degas.

"PAINTING, *n*: The art of protecting flat surfaces from the weather and exposing them to the critic." Ambrose Bierce (1842-1914), American writer. *The Cynic's Word Book*, also known as *The Devil's Dictionary*, 1906.

"Whenever I see a Frans Hals I feel like painting, but when I see a Rembrandt I feel like giving up!" Max Liebermann (1847-1935).

"Painting is just another way of keeping a diary." Pablo Picasso (1881-1973), modern Spanish artist.

"Painting is a blind man's profession. He paints not what he sees, but what he feels, what he tells himself about what he has seen." Pablo Picasso (1881-1973), Spanish artist.

"The painting has a life of its own." Jackson Pollock (1912-1956), American Abstract Expressionist painter.

"Painting is an attempt to come to terms with life. There are as many solutions as there are human beings." George Tooker (1920-), contemporary American painter.

Task 5. Write an essay to comment on one of the ideas expressed above.

UNIT VI COLOUR

Task 1. Study the terms. Translate the sentences with them into Ukrainian.

1. spectrum - спектр

A spectrum is formed by a ray of light through a prism.

2. ultraviolet – ультрафіолетовий

Ultraviolet rays cause the skin go darker.

3. infrared - інфрачервоний

These experiments are risky because the scientist is exposed to the infrared radiation.

4. wave length – довжина хвилі

The distance between 2 corresponding points in a light wave is called wavelength.

5. pigment - пігмент

Only natural pigments are used to dye the wool.

6. dyestuff - фарбники

Substances used to change the color of things are referred to as dyestuffs.

7. primary color – основний колір

Primary color is any of the three colors, red, yellow and blue, from which all other colors can be obtained by mixing.

8. tint – відтінок, тон

Tints of green appeared in the sky at dawn.

9. shade - тінь, відтінок

There is not enough light and shade in your drawing.

You'd better take a lighter shade of wallpaper for the bedroom.

Task 2. Read the words in English. Match the adjectives with their translations.

acid green

темно-синій

midnight blue

вогняно-червоний

navy blue

пастельний

terracotta

блідо-жовтий

eggshell

гаряча фуксія

beige
fiery red
hot fuchsia
charcoal
lilac

бузковий
теракотовий
темно-сірий
кислотно-зелений
темно-синій

Task 3. Divide the adjectives into several columns according to the word-formation.

insipid lifeless listless bland dingy flat matt dim relaxing comforting dignified somber quieting	нудний, неживий нецікавий, неживий м'який, заспокійливий апатичний, бездіяльний, байдужий, млявий вицвілий, тьмянний, похмурий тьмянний, матовий матовий матовий, неяскравий розслабляючий утішний благородний, величний темний заспокійливий	overpowering peaceful sugary sickly sweet girly alerting stabilizing reassuring complacent soothing contemplative unwelcoming chilly	всепоглинаючий спокійний, мирний солодкий, нудно- солодкий нудно-солодкий дівчачий попереджувальний стабілізуєчий заспокійливий, підбадьорюєчий поважний, шанобливий заспокійливий пасивний, споглядальний негостинний прохолодний
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Task 4. Define the following notions in your own words:

loyalty, serenity, authority, creativity, eccentricity

Task 5. Read the text. Think of an appropriate heading to it.

We see colour only when there is light. When white light is passed through a suitable prism, the wave lengths that compose the light are diffracted or bent at slightly different angles, and are thus separated to form bands of colors collectively called the spectrum.

Wave lengths slightly shorter than the violet part of the spectrum are called ultraviolet and are invisible; those slightly longer than the red end of the spectrum are called infrared and are also invisible. If the wave lengths forming the spectrum are recombined by means of a lens, the white light is re-formed.

Objects exhibit color because of the selective manner in which their surfaces reflect and absorb light. As light strikes a colored surface, certain wave lengths are reflected to a greater extent than others, thus determining the color of the object.

White surfaces reflect all wave lengths equally and absorb very little energy; thus, white is a mixture of equal parts of all colored wave lengths. A black surface absorbs all wave lengths almost completely and is, therefore, the virtual absence of color.

As wave lengths strike the eye, they stimulate receptor nerves in the retina and create the sensation of color. As children, we learned to associate names with particular sensations.

Task 6. Write out the key words (no less than 4 terms)

Task 7. Answer the questions

1. What is spectrum?
2. What is the difference between ultraviolet and infrared wave lengths?
3. Why do objects exhibit colour?
4. How is the color of the object determined?
5. White is the virtual absence of color, isn't it?

Task 7. Read the text. Entitle it.

Task 8. Read the text. Entitle it.

Color has various dimensions and characteristics that are given special names.

We might point out that there is a difference between working with colored lights and working with colored pigments and dyestuffs. In discussing the spectrum, we noted that white light is the mixture of all wave lengths. Thus, a suitable mixture of colored lights should produce white. Proper portions of red, yellow and blue will produce white light through additive mixture, and these colors are called the additive primaries.

Similar mixtures of pigments and dyestuffs will not produce white because these colors work on a subtractive principle, selectively absorbing proportions of the white light incident upon them. Suitable mixtures of paints or dyes will produce neutral grays but not white. Other pigments or dyes will absorb so much light that in proper mixtures they will produce black.

Hue is the term used for the name of any color. Yellow, green, red, violet are all hues.

Intensity is the saturation or purity of a color, its brightness or dullness. A color in its purest form has greatest brilliance. To dull a color when mixing pigments, add the complement (the color directly opposite it on the color wheel). Gray, black or white will also dull a color, causing it to lose its brilliance. A wide range of browns results from the mixture of black and grayed red orange, orange and yellow orange. Although the beiges and browns are often referred to as "neutral" in the sense that they combine well with many other colors, in true color terminology only black, white and gray are actually neutral.

Background colors are usually somewhat dull, grayed, or neutralized, because such colors are easier to live with in large amounts. Saturated colors are often reserved for hallways, powder rooms or other rooms where people do not spend a great deal of time. Intense colors are also used for accessories because they draw more attention than dull colors.

Value is the lightness or darkness of a color. The lightest value of a color is almost white, and the darkest is almost black.

Tint describes the colors that are nearer white in value. Pink is a tint of red, white has been added.

A shade describes colors that are closer to black in value. Shades are made by mixing the hue with black; navy blue is a shade of blue.

Task 9. Write an abstract of the text.

Task 10. Decide if the following statements correspond to the contents of the text. Correct the false statements.

1. A certain mixture of colors should produce white.
2. Red, yellow, green and violet are all hues.
3. The complement is the nearest colour on the colour wheel.
4. Concentrated colours are rarely used for accessories to draw attention.
5. You can get pink hue by mixing red with black.

Task 11. Write out the key words (no less than 7 terms)

Task 12. Read the text. Think of the title to it.

Hues on the color wheel are of different values. Yellow is the lightest color on the wheel and purple is the darkest. The values in which the hues are shown on the color wheel are known as normal values. The value scale of the color wheel follows:

Value scale	Value Steps on the Color Wheel	
White	White	
High light	Yellow	
Light	Yellow orange	Yellow green
Low light	Orange	Green
Middle	Orange red	Green blue
High dark	Red	Blue
Dark	Red violet	Blue violet
Low dark	Violet	
Black	Black	

The effect of values. Light values raise the spirits and stimulates us to be active. They also recede in and make an object seem far away. Light values make a room seem larger, they create a sense of spaciousness and airiness. At night, light colors in rooms yields a higher degree of reflection

and need less high-wattage illumination. A ceiling painted white will seem considerably higher than one painted a darker color.

A small room will appear larger if light pink is used on the walls instead of medium-value rose. A protruding fireplace will recede into the wall when it is painted a lighter color than the rest of the area.

Middle values are relaxing and comforting. They are often used in rooms where people must spend a great deal of time.

Dark values are serious, dignified, and often somber in feeling. They can cause a room have a feeling of restfulness - or one of extreme depression. Dark values tend to advance.

Closely related values are quieting; strong contrasts are stimulating and alerting and call attention to things that are important. Strong contrasts increase the apparent size of the object and bring visually forwards.

Task 13. Answer the questions to the text.

What is the value scale range?

What are the value steps on the color wheel?

Which color on the wheel is the lightest?

Which color on the wheel is the darkest?

Do light values stimulate or depress activity?

What is the effect of middle values?

Do dark or light colors recede in?

Task 14. Read the text.

Color Psychology

How does color make you feel?

Ever since man understood that fiery red meant danger and those purple berries were poisonous, color has been associated with moods and feelings. Religious artists employed color as a form of shorthand; people looking at a stained glass window or a heraldic coat of arms would have instantly known that the blue used in it equalled contemplative faith or that the green meant hope. Even saints were associated with a particular color.

If you always feel down in the dumps in your dining room or crazy in your kitchen, find out why.

Red	Danger, passion, energy, warmth, adventure, optimism Best for: dining rooms – makes you feel sociable, lively and stimulates the appetite Pitfalls: It can be overpowering and give you a headache. Either vary the shade, paint just one wall in it, or keep it for accessories only. Don't use it in a baby's room.
Pink	Color of love Best for: bedrooms can be peaceful and restful. A hot fuchsia can introduce some passion Pitfalls: Can look overpoweringly girly and sickly sweet. To counteract this, introduce some hints of dark charcoal or black
Orange	Stabilizing, reassuring, warm, is thought to aid digestion Best for: living rooms and dining rooms Pitfalls: Might keep you awake in a bedroom. Can make a room look smaller because it is an advancing color, so make sure the room gets plenty of light
Green	Color of nature and energy, calming and restful, balance (halfway between red and blue) security, stability Best for: bedrooms, living rooms Pitfalls: Too much green is thought to make you too complacent or too laid back - inject some red or orange to counteract this
Blue	Calming and soothing; promotes intellectual thought; believed to keep hunger at bay; loyalty, serenity, authority, protection; contemplative; calm; prevents nightmares Best for: bedrooms, bathrooms, study Pitfalls: Can look cold and unwelcoming. Make sure it doesn't look too chilly by choosing a blue with a warm undertone
Yellow	Color of sunshine and energy, stimulates the intellect Best for: kitchens, dining rooms or north facing rooms Pitfalls: Not restful for a bedroom. If you are feeling emotionally distressed, it is thought yellow will make you feel worse
Lilac	The most spiritual color; suggests the misty area between sky and heaven, feminine Best for: bedrooms and bathrooms to create a stress free

	sanctuary Pitfalls: Can be insipid. Liven it up with black or silver or both
Purple	Color of creativity, fertility, joy, but also magic, evil, sex and death Best for: bedrooms Pitfalls: Can be overpowering
Brown	Safe, stable, practical Best for: living rooms Pitfalls: Introduce a livelier color for some mental stimulation such as green or blue
Black	A non-color. It absorbs color and reflects nothing back. Death, eccentricity, drama. Best for: to be used in moderation Pitfalls: depressing - think of all those angst ridden teenage bedrooms. Don't use it as a base color but use it to temper the sweetness of other sugary colors such as pink

Task 15. Consider the difference between the following verbs. Make up your own sentences with verbs in italics.

1. *to match* - підбирати (до пари, під стать; за кольором, формою и т.ін.); сполучати

to be well / ill matched - бути добре / погано підібраним; добре / погано сполучатись, пасувати / не пасувати

2. *go with* - підходити, гармонувати; відповідати, пасувати
That green hat doesn't go with the blue dress. — Цей зелений капелюх не пасує до синього плаття.

3. *fit* – бути до міри, якраз, пасувати до чогось

4. *harmonize* – узгоджуватись, сполучатись, гармонувати
Green harmonizes with red. — Зелений сполучається з червоним.

5. *blend with* – сполучатись, гармонувати
These houses seem to blend well with the trees and the surrounding land.
— Ці дома чудово гармонують з деревами та навколишнім пейзажем.

6. *go together* - сполучатись, гармонувати

I like the way the blue carpet and the gold curtains go together. — Мені подобається, як сполучаються синій килим та золоті завіси

Task 16. Answer the questions to the text.

1. Which color
 - is believed to keep hunger at bay?
 - is the most spiritual?
 - best for bathrooms?
2. Which colors
 - are recommended to be used in a kitchen?
 - should be avoided in a bedroom?
 - are thought to stimulate mental activity?
 - can temper sugary colors?
 - are considered to be sickly sweet?
 - aggravate stress?
 - are overpowering?

Task 17. Translate into English.

1. Білі стіни надають кімнаті відчуття просторості.
2. Мені не подобається підбір кольорів у їхній вітальні.
3. Я ніколи не бачила ваш дім у денному світлі.
4. Вам найкраще пасують світлі кольори.
5. Подібн а суміш пігментів частково поглинає білий колір.
6. При поєднанні синього з чорним ви отримаєте темно-синій відтінок.
7. Його обличчя стало пурпуровим від люті.
8. Цього сезону в моді знову вогняно-червоний.
9. Не зловживайте рожевим кольором в інтер'єрі, він може бути нудно-солодким.
10. Рудий колір добре впливає на травлення, тому за звичай використовується у їдальнях.
11. Ви будете почуватись спокійно у кабінеті, стіни якого пофарбовані у блакитний.
12. Зелений – колір природи, енергії, надійності та балансу.
13. Що стосується фонових кольорів, рекомендую тьмяні, оскільки у цій кімнаті ви проводите багато часу.

UNIT VII

DRAWINGS IN DESIGN

Part I

Task 1. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

challenge - виклик	surface – поверхня
chest – ящик, скриня	trivial - дрібний
delineation – план, зображення	representation- зображення
embellish - прикрашати	by means of -за допомогою
flat – плоский	stroke, touch - штрих
increase – збільшувати(сь)	chiaroscuro -світлотінь
inner – внутрішній	size- об'єм
mind – розум	plane - площа
mysterious - таємничий	space - простір
preliminary - попередній	subsidiary, additional -
profound – глибокий	допоміжний
sentiment - почуття	

Task 2. Match the words with the prepositions:

differ	for
agree	to
substitute	with
a demand	from
according	with
be concerned	for

Task 3. Choose the synonymous group to the following words. Memorize the synonyms.

profound	denote, betoken, show, mark, signify
prepare	confidence, mystery, enigma, formula
action	order, disposition, array, grouping, plan
secret	interest, affect; affair, business, duty

mysterious
concern
conception
element
indicate
distinguish
arrangement

deep, fathomless, abysmal; keen, acute
unexplainable, enigmatic, puzzling
adapt, adjust, fit, equip, provide, anticipate
tell, apart, judge, separate, discern, descry
idea, notion, thought, theory, design, plan
deed, feat, exploit, enterprise, movement
component, member, unit, section, part

Task 4. Give the opposites to the following words:

Profound, differ, agree, preliminary, mysterious, increase, appreciate, conventional, fruitful, trivial.

Task 5. Give the definition of the term:

Drawing, designer, artist, sculpture, work of art, architecture.

Task 6. Read the text. Give the title.

What is a drawing? And how does a designer's drawing differ from an drawing? Most designers will agree with the sentiments expressed in the quotation from sculptor Henry Moore – substitute “model” or “prototype” for the word “sculpture” and it could have come from any practicing designer.

In fact, a designer's drawing and an artist's drawing have more in common than might first be supposed. They are both preliminaries to some future work, a preparation for action. And until quite recently, the artist's drawing was kept as secret and mysterious a document as a designer's drawing is today. It is only the increasing demand for works of art and the growing use of media such as pencil and charcoal in the 20th century as a means of expression that have brought the artist's drawing out of the codex and plan chest. Now it is embellished with a frame and hangs on the gallery wall to be appreciated as an art object in its own right.

A drawing, according to Philip Rawson in his book *Drawing*, is “that element in a work of art which is independent of colour or actual 3D space, the underlying conceptual structure which may be indicated by tone alone.” Or, by Jean Leymarie in the book *History of an Art: Drawing*, it is defined as “a strange challenge to the powers of mind and hand, this art of

representing the coloured mass of objects or recording one's inner visions on a thin flat surface by means of lines which do not exist in nature."

A more conventional dictionary definition might be concerned with delineation, as distinguished from painting, and how arrangements of lines determine form. Arguments about whether a drawing can be coloured or not, and about line versus tone, are not particularly fruitful to the practicing designer. But these issues, although seemingly trivial today, have had a profound effect in the past on the way designed objects look.

Task 7. Answer the questions to the text:

What is a drawing? Give all the definitions.

How does a designer's drawing differ from an drawing?

Task 8. Translate into English:

Рисунок – це будь-яке зображення, що виконується за допомогою графічних засобів - контурних ліній, штрихів, плям. Різними поєднаннями цих засобів (комбінацій штрихів, поєднання плям та ліній і т. ін.) у рисунку досягається пластична моделіровка, тональні та світлотіньові ефекти. Рисунок, як правило, виконується одним кольором.

Сфера використання рисунка надзвичайно велика, включає різноманітні види науково-допоміжного, прикладного, технічного характеру та художнього. Рисунок лежить в основі всіх видів художнього зображення на площині (живопис, графіка, рельєф). Він складає початкову стадію виконання творів живопису та відіграє важливу роль у визначенні форми, об'єма предметів та розміщення їх у просторі. Тому терміном "рисунок" позначається взагалі сукупність лінійно-пластичних елементів живопису, що визначає структуру та просторове співвідношення форм. Рисунок як самостійна галузь художньої творчості є основним розділом графіки.

Існують певні різновиди рисунка, що відрізняються методами малювання, темами та жанрами, технікою та характером виконання. Рисунок може бути самостійним твором графіки або допоміжним матеріалом для створення живописних, графічних та скульптурних творів.

Part 2

Task 1. Find the equivalents. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

consultancy	передати на розгляд
commission	сучасний
contemporary	накреслити
briefing	невеликий
small-scale	схвалення
preparatory	поєднувати
submit	відповідати, налагоджувати
conform	вказівка, наказ
approval	на місці
akin to	консультування
cartoon	переносити
squaring-up	споріднений, схожий
on-site	обробка торцевих сторін
solitary	інструкція
pounce	спрощене зображення
craftsman	речовина
incorporate	підготовчий, попередній
to jot down	прибичник
stickler	ремісник
substance	єдиний, окремий, виключний

Task 2. Choose the synonymous group to the following words:

striking	accepted, approved, proper, formal
contemporary	outlive, persist, last, continue, remain
survive	exact, precise, correct, true, careful
individual	impressive, wonderful, extraordinary
accurate	completely, wholly, totally, utterly
entirely	up-to-date, fashionable, current, recent
conventional	separate, distinct, particular, singular

Task 3. Give the opposites to the following words:

Similarity, satisfied, entirely, ambiguous, accuracy, produce, survive, leave.

Task 4. Explain the phrases:

Design-to-production cycle, encapsulate ideas, multi-disciplinary team, presentation drawing, a finished object, in-company standards.

Task 5. Read the text. Give the title.

The "design process" of the Renaissance painter, as described in Jean Leymarie's book, bears a striking similarity to the working methods of a contemporary design consultancy. After receiving a commission and briefing from the patron, the artist puts down the first idea as a rapid sketch in diagrammatic strokes usually in pen and ink or red chalk. This is followed by series of preparatory drawings leading to a single composition. The artist then studies in detail all the individual parts of the composition. When satisfied with these, the painter produces a full and accurate drawing, a small-scale version of the proposed work executed in media akin to the proposed painting and indicating the tonal values, which is submitted to the patron (client) for approval. The last stage is the cartoon, produced full-size by squaring-up the drawing. Few cartoons survive because they were used on-site as a pattern for the production of the final painting – the lines were pricked out and pounced (transferred) to the wall or canvas using chalk dust.

There were artists in the 17-th century who separated the act of design from the act of execution in the way that some product designers content themselves with conceptualizing, and leave the production details to craftsmen in the factory. These would design work in the form of a sketch and leave the execution entirely to their assistants.

The design process of today's designer thus incorporates all kinds of drawing techniques, each appropriate and necessary to a particular stage in the design-to-production cycle. During the concept stage, the designer is mostly externalizing thoughts – a seemingly solitary process – but must also be able to jot down and encapsulate ideas at briefing meetings with the client, and be able to communicate shapes to colleagues in a multi-disciplinary team.

Presentation drawing must give a convincing impression of the finished object quickly and economically, to people untrained in "reading"

conventional engineering drawings. Production people, on the other hand, are sticklers for precision and demand complete and unambiguous drawings that conform to national, international or in-company standards. The role of the drawing in design may remain constant throughout the design process, but its form and degree of accuracy change stage by stage.

Task 6. Answer the questions to the text:

What was the "design process" of the Renaissance painter?

Why did only few cartoons survive?

How does the design process of today's designers differ from the earlier pattern?

What is the aim of a presentation drawing?

Task 7. Translate into English:

У технологічному відношенні рисунки різняться сухими або рідкими фарбуючими речовинами. Однією з найдрівніших фарбуючих речовин є вугілля. Відомі ще з часів античності, у 12-16 ст. мали широке розповсюдження металеві (свинцеві, срібні) штифти. В епоху Відродження входять у використання сланцевий, так званий італійський, олівець ("чорна крейда") і сангіна ("червона крейда"). З 16 ст. використовується графіт, з кінця 18 ст. – сучасного типу олівці. У якості рідких фарбуючих речовин, що наносили пером або пензлем, використовуються туш, чорнила та ін. Основою для рисунка можуть бути різноманітні матеріали. У давньому світі широко використовувався папірус, у середні віки - пергамент, іноді вкритий спеціальним ґрунтом. З епохи Відродження основним матеріалом для рисунка слугує папір, винайдений у Китаї та відомий у Європі з 10-12 ст. Папір також часто ґрунтується та фарбується у різні кольори. Різноманітність матеріалів та способів їх використання у рисунку, можливість їх комбінування сприяють надзвичайному багатству зображувальних прийомів та художніх різновидів рисунків.

Part 3

Task 1. Find the equivalents. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

bearing	припущення
commentaries	аспект, відношення
treatise	засіб, метод
unifying	винахідливий
deity	втілення
exploration	розчарування, зневіра
enquiry	поєднуючий, узагальнюючий
tangible	класифікація, розміщення
inventive	мемуари, записки
means	мучити
externalizing	вивчення, дослідження
arrangement	божество
assumption	наукова праця
shorthand	інакше, в іншому випадку
diversity	майстерність
otherwise	проблема, запит, сумнів
frustration	матеріальний, помітний
to torment	стенографія
exceptional	чарівний
creative	навколишній
inestimable	жадаючий
surrounding	виключний
fascinating	неоцінений
eager	творчий
dimension	вимір
excellence	різноманітність

Task 2. Find the synonyms to the following words:

Fundamental, unifying, principle, major, importance, style, confident, purpose, precise, tangible.

Task 3. Give the opposites to the following words:

Fundamental, major, to permit, confident, powerless, tangible, inventive, personal, real, beauty.

Task 4. What do you know about:

- Jacopo Bellini,
- Leonardo da Vinci?

Task 5. Read the definition and guess the term:

a) Works of art made with paint on a surface. Often the surface, also called a support, is either a tightly stretched piece of canvas or a panel.

b) A three-dimensional work of art, or the art of making it. Such works may be carved, modeled, constructed, or cast.

c) The art, craft, and science of producing permanent images of objects on light-sensitive surfaces.

d) Technical skill, manual dexterity, considered apart from the fine arts, or from the cerebral, expressive, or aesthetic aspects of them. Also, any of the manual activities performed by artisans, as distinguished from the specific group of techniques that are practiced by artists in the making of fine art.

e) A plan, or to plan. The organization or composition of a work; the skilled arrangement of its parts.

Task 6. Read the text. Give the title.

The way drawing has been taught and the importance attached by society to a drawing education has had a fundamental bearing on the way the world looks.

In the mid-15th century, the commentaries of Ghiberti and the systematic treatises of Alberti extended to sculpture and architecture the basic theory and practice of drawing, which thus became the common unifying principle of the three major visual arts. The Venetian sketchbooks of Jacopo Bellini contain studies for architecture, painting, sculpture and ornamentation in a graphical style confident of its means and purposes. For Leonardo da Vinci, drawing became “not only a science but a deity”,

permitting the precise exploration of areas, where language is powerless. He saw painting as a science of knowledge; drawing as a method of enquiry. Drawing, he said, is the tangible form of idea, the inventive act which produces a work of art.

A drawing is thus a means of externalizing a concept, but it is also a very personal statement; it is something much more than just an arrangement of marks on paper. A drawing is an analogue of the real thing: a stylized collection of symbols, assumptions and memorized shorthand that can be read, or misinterpreted, just like writing.

David Hockney said, "In memorizing to draw you memorize to look. It's not the beauty of the marks like in writing, it's the beauty of the ideas. But in drawing it's a bit of both – it's beauty of ideas, of feelings and of marks. If you can draw, even a little bit, you can express all kinds of ideas that might otherwise be lost – delights, frustrations, whatever torments you or pleases you. Drawing helps you put your thoughts in order. It can make you think in different ways. It naturally gives you a sense of harmony, of order."

Task 7. Answer the questions to the text:

- What did the attitude towards drawing develop?
- How did Leonardo da Vinci describe drawing?
- What is drawing?
- What definition of drawing did David Hockney give?

Task 8. Do you agree with David Hockney that "In memorizing to draw you memorize to look. It's not the beauty of the marks like in writing, it's the beauty of the ideas." Prove your point of view.

Task 9. Translate into English:

Рисунок - один з найдавніших видів мистецтва. У первісному мистецтві рисунок, невід'ємний від наскального та печерного живопису, є близьким до життя в епоху палеоліту (зображення тварин та сцен полювання), а потім схематизується в епоху неоліту, часто переходячи в орнамент.

Організуюча роль рисунка, як основи зображення на площині ясніше виступає у настінних малюваннях у Давньому Єгипті та

давньосхідних цивілізаціях; рисунок вже стає чистою графікою на давньоєгипетських папірусах періода Нового царства (16-11 ст. до н. е.). Виключне спостереження реального життя притаманна рисунку тушшю на шовку та бумазі, що майстерно створювались з 4 ст. до н. е. у Китаї, а пізніше також у Японії та ін країнах Далекого Сходу (пейзажі, зображення людей, тварин, квітів.).

В епоху середньовіччя лінійний рисунок розвивається як архітектурне креслення та графічний взірець для створення деталей архітектурного декора, є іконографічним зразком при виконанні складних композицій та в цілому носить схематичний та орнаментальний характер. Специфіка рисунка як вида графіки краще визначається при оформленні середньовічних манускриптів. В епоху Відродження закладаються теоретичні та практичні основи всієї наступної творчої та навчальної методики європейського рисунка (вивчення законів перспективи, світлотіні, пластичної анатомії).

Part 4

Task 1. Find the equivalents. Memorize the vocabulary. Use every word (or word combination) in sentences of your own.

codification	примусити, стримувати
constrain	продовження
increase	розраховувати
oblique	гострий, скісний
curve	походити, встановити
continuation	визнавати
derive	практичний, оснований на досліді
account	кодифікація
determinate	кривий
assume	збільшення
empirical	спостереження
observation	визначений, фіксований

Task 2. Find the synonyms to the following words:

Renaissance, to present, accordingly, mechanical, to perfect, increase, empirical, continuation, to constrain.

Task 3. Give the opposites to the following words:

Abstract, to perfect, to present, increase, empirical, continuation, determinate, agreeably, to proceed.

Task 4. Make a report on the topic "Renaissance".

Task 5. Give the definitions of the terms:

Angle, square, circle, ellipse, oval, pyramid, serpentine, weaving and spiral.

Task 6. Read the text. Give the title.

The codification of drawing began in the treatises of the Renaissance and was perfected in the textbooks of the 19th century, in which axioms were presented to analyse design problems. Most of these textbooks, according to design historian David Brett, taught drawing in a dry linear style. This was true not only for mechanical design, but for the decorative arts as well, for example textile design, in which design was being constrained by the technology of the increasingly mechanized means of production.

An example of dogmatism can be seen in Willim Robson's *Grammigraphia* (1799) which states: "Lines are four; perpendicular, horizontal, oblique and curve. All the variety of appearance in nature are presented by a combination of these four lines placed agreeably to proportion and position. A line is the continuation of a point. A point can proceed in four ways only and from these we can derive a mathematical account of all the common figures: angle, square, circle, ellipse, oval, pyramid, serpentine, weaving and spiral. Use line as distinct and as determinate as possible." In 1842, William Dyce was writing: "The purpose

of drawing is to study nature and its laws to form abstractions, beauties of form and colour [which] by the very fact that they are abstractions assume, in relation to the whole progress of art, the character of principles or facts, that tend by accumulation to bring it to perfection.” Drawing based on empirical observation began to take a back seat.

Task 7. Answer the questions to the text:

When did the codification of drawing begin?

How was design taught?

How were lines described in Willim Robson's *Grammigraphia*?

What is the purpose of drawing according to William Dyce?

Task 8. Translate into English:

В Італії точність та пластична ясність рисунка, характерна деякою деталізацією для майстрів 15 ст. (Пізанелло, А. Поллайоло, В. Карпаччо), отримує особливу насиченість та виразність у художників Високого Відродження (Леонардо да Вінчі, Рафаель, Мікеланджело).

На відміну від чіткої лінійно-пластичної манери більшості італійських рисувальщиків римсько-флорентинського круга, венеціанські художники 16 ст. (Тіціан, П. Веронезе) створюють вільний живописний, ескізний стиль. У німецькому рисунку 16 ст., на фоні якого виділяються універсальна широта, лінійно-штрихова чіткість робіт А. Дюрера та живописність штудій М. Нитхардта (Грюневальда), в цілому переважає лінійний початок. Лінія - лаконічна, іноді підсилена штрихуванням, часто стає майже каліграфічною [В. Хубер, А. Альтдорфер]. Блискучий розвиток у 15-16 ст. отримує олівцевий портрет, тонко фіксуючий фізіономічні особливості моделі (Я. ван Ейк у Нідерландах, Ж. і ф. Клуе у Франції).

З кінця 16 ст. виробляється (італійцем Аннібале Карраччі та ін.) "академічний" рисувально-учбовий процес, що протримався в АХ багатьох країн до кінця 19 ст.: на першому етапі учень копіював "оригінали" - рисунки визнаних майстрів, потім вчився передавати об'ємну форму, малюючи з гіпсових зліпків античних статуй, і лише на третьому етапі йому дозволяли малювати з живої натури. Цей

метод, давав тверді систематичні навички рисунка, але віддаляв від живого, безпосереднього сприймання дійсності. На відміну від чіткого, але абстрагованого академічного рисука в 17 ст. складаються глибокі за змістом, сміливі та вільні за манерою рисунки Рембрандта, пейзажистів Я. ван Гойєна та Я. ван Рьойсдала, сповнені життя, енергічні малюнки П. П. Рубенса у Фландрії та ін.

UNIT VIII

HISTORY OF ARCHITECTURE

Task 1. Read the text.

Stylistic Traditions

People who are interested in purchasing and perhaps remodeling an older home should be aware of the existence of different styles. The majority of homes built today do not, as a rule, cling to traditional styles of architecture, although any home may interpret the "flavor" of some particular style. Except for houses in the luxury class, where costs are not a primary factor, the expense of duplicating many of the older and more familiar architectural styles is prohibitive. Besides, newer concepts of form and function in small homes have made it more desirable to adapt only certain styles of architecture and to develop new ones that are more suitable to modern building methods and materials. Thus, current home building includes various designs that are inspired by traditional styles but that make no attempt to copy them in an authentic fashion. This approach to house design has given rise to numerous hybrid styles that almost defy classification. It has become the custom, therefore, to refer to the style of a house in several different ways. The architect or the builder may give it a name suggestive of its origin or may merely designate it by a number.

Task 2. Fill in with the the gaps given words. Pay attention to the prepositions

1. I've always been ... in cars, ever since I was a child.	a. inspired
2. They were very ... of the tense atmosphere in the room.	b. clings
3. The smell of smoke ... to one's clothes for a long time.	c. interested
4. These programs are ... for use on home computers.	d. refer
5. The design was ... by a Greek vase painting.	e. suitable, f. aware

6. If you want to build a good house, ... to an expert.	
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Task 3. Rewrite the sentences in the Past tense. Make up your own sentences with the words in italics.

1. *Although* we are a small company, we manage to produce over 10, 000 cars a year.
2. The room is empty *except for* an old piano in the corner.
3. She's going to buy a fridge, a freezer, a microwave, and lots of other things *besides*.
4. He is out of the country and *therefore* unable to attend the meeting.
5. *Thus*, the company is interested in selling its products overseas.
6. Even *though* he has no experience he seems to be suitable for the job.

Task 4. Read the text.

The Colonial Period: 1661 to 1775 In North America, the available materials and the geographic location had a decisive impact on colonial architecture. The first settlers brought with them the knowledge, skills, and tastes of their national backgrounds. Most of the structures were medieval in form, resembling the styles used in Flanders and Holland during the late Middle Ages. Because of the settlers' knowledge and their lack of funds, tools, and time, the buildings had a natural, rough look. These homes were built of wood, brick, or stone; often all three materials were used in the same house. The brickwork had a pattern of varicolored pieces. Along the edges the bricks were laid in a mouse-tooth finish. Frequently the roofs were steep, single-pitch, and A-shaped, with end chimneys. The gables were either stepped or straight-line, but always outstanding. Tile roofs predominated in the towns, thatched roofs in the country. Later double-pitch gambrel roofs were used, with or without spring eaves. The stone houses were built with local stones and lime mortar mixed with shells, laid

in random widths. Clapboards were used to cover the materials, such as local clay and straw, or mud and oyster-shell lime substances that would not hold up under inclement weather conditions. A house often grew with the family's needs. An addition would be built in the taste and style of the respective period. Dutch and French windows between 1680 to 1700 were of the casement type and opened inward (English casement windows opened outward). Many times, under the spring eave a stoop was built, generally accessible by one or more steps. Side railings were used, with benches placed alongside them for family use.

The Classical Revival.

Georgian Colonial: 1700 to 1780. Georgian architecture was inspired by renewed interest in classical culture and the Renaissance. The Georgian style used Roman forms but expressed these forms in new ways and in novel combinations. Because America, at that time, had few architects, the new design was an outgrowth of the owners' and the carpenters' interpretation of classical forms. The materials used were mostly wood and brick. The brickmakers became so proficient that they even made molded brick, which was used in water tables, chimney caps, doorway trim, or belt courses. Wood was used where intricate carved moldings and details were needed to enhance the new classic appearances. Frequently a coat of plaster or stucco was applied over the exterior brick and stone. The Georgian style resulted in well-built structures, planned in regular geometric symmetry. The front door showed a major change from the colonial door, with relief columns on both sides of the entrance, and pediments or classical entablatures at the top of the door. Sliding-sash windows were a new feature; they were framed by an architrave and sometimes topped by a pediment or cornice. Water-table molding brick was used to mark the top of the basement level. A belt course was placed between floor levels to mark the level of the floor joists. Roofs were either hipped or featured the low-pitched classic pediment shape; but in this period of transition, some of the colonial roof styles remained, such as the gable and the gambrel. The eaves were frequently decorated by classical cornices, such as dentils or other moldings. When the peak of the roof was flattened, it was topped by a baluster or railing.

Greek Revival: 1800 to 1840. The Greek Revival represented a rebirth of the traditional Greek temple. Buildings were mainly rectangular in shape, with Doric, Ionic, or Corinthian columns supporting a portico, which either went around the building or was confined to just the front.

Sometimes the front of the building had a pediment over the portico. Most roof slopes were pitched low or were almost flat. Doors and windows were less decorative. Plain or dentil cornice designs at the base of the roof could be seen. The construction was of smooth brick or smooth clapboard. As might be expected from the name, columns are the outstanding feature of the Greek Revival.

The Adam or Federal style: 1760 to 1820. The Adam period was inspired by the Georgian Colonial style. Symmetrical, rectangular in form, and abounding in geometrical ornaments, the style is more delicate and light in appearance than Georgian Colonial. The doors were outstanding; they were flanked by slender columns or glass windows or both, with semielliptical leaded-glass transoms. A semicircular porch, supported by slender delicate columns, may appear over the door. Windows may be semicircular at the top with very fine leading; some small, semicircular, recessed windows may have scalloped leading. The roof was normally unobtrusive, sometimes concealed by a balustrade or decorative cornice. Brick was set in the Flemish bond. Some of the houses were still sided by clapboard. The Federal farmhouse style was simpler yet. Most farmhouses may have only one or two features of the Adam style. In both styles, the house was flanked by two end chimneys.

Task 5. Find antonyms among the following words:

inaccessible, outward, natural, seldom, late, early, accessible, rough, same, mild, varicoloured, frequently, inclement, inward, synthetic, one-colour, smooth, different.

Task 6. Find the synonyms among the words and word combinations below:

novel, keep secret, delicate, skilled, renewed, unusual, prominent, frequently, often, not high, replaced, proficient, low, conceal, thin, flat, outstanding, subtle, level, slender.

Task 7. Read the text.

The Gothic Revival

Early Gothic: 1810 to 1855; Late Gothic: 1895 to 1912. Two periods characterize the Gothic Revival; one, the Early Gothic Revival, was popular around the early 1800s. The other style is called the Late Gothic Revival. This period was a rebirth of the earlier revival, blooming around the late 1800s. The differences between the two are characterized by several details.

The Early Gothic Revival had the typical Gothic pointed-arched windows and doors, clover-leaf carvings, dormers with tracery windows, gables, and buttresses with finials; Early Gothic favored the use of crenellations (battlements). All of these forms were borrowed from the medieval style but were applied in a new fashion. Wood, brick, or stone could be used; the wooden bargeboard was often ornamented in the gingerbread pattern. All of these materials were used in either similar shades of the same color, to give the building a monochromatic effect.

The Late Gothic Revival resembled the Early Gothic in the use of pointed-arched windows and doors, clover-leaf carvings, tracery windows, buttresses with finials, and battlements. The major difference was the superior craftsmanship in the use of masonry and stone, with more varied, detailed moldings. The Gothic detail was often of terra-cotta, especially in commercial buildings.

Romanesque Revival: 1840 to 1870. More subdued than the Gothic Revival, the Romanesque style predominated in utilitarian or commercial structures. The primary features are the use of rounded-arched windows and doors that had rounded arches around them. Corbel designs are used in an arcade effect around the gables. The wall surfaces are mainly wide areas of unbroken masonry, brick, or stone, giving the building a very simple, yet refined, look.

Task 8. Complete the list according to the model:

	Noun	Adjective	Verb
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1	<i>beauty</i>	<i>beautiful</i>	<i>beautify</i>
2			characterize
3		popular	
4	difference		
5			favour
6			borrow
7			apply
8		wide	

Task 9. Read the text.

THE VICTORIAN PERIOD

Italian Villa style: 1835 to 1875. The buildings of the Italian Villa style are well-defined rectangular or square blocks, grouped with symmetrical elevation of the individual units. Often there is a square or octagonal glazed cupola or tower somewhere on the structure. Windows may be round-headed or rectangular, often grouped in twos or threes. The roofs are slightly pitched, with very attractive eaves, which are frequently corniced and usually supported by brackets. Most such houses have a veranda or a balustraded balcony. Walls are often brick with a facing of sandstone, but the outside walls may also be of clapboard.

Victorian Italianate: 1853 to 1890. The Italianate style is mainly recognizable by a busy network of accented windows in rows. Each level of the building is divided by an overhanging molding on which the windows rest, giving the style its characteristic vertical look. The windows on each floor are uniform, with outstanding moldings or columns, always topped by an arch that may be rounded, rectangular, flat-topped with rounded sides, or stilted and segmental. On each level the windows are somewhat different from those on other levels, lending variety to the building. The Victorian Italianate windows have a busy, shadow-box aspect.

Victorian Stick style: 1854 to 1880. The diagonal stickwork of some Victorian buildings may have an overlay of other boards, vertically or horizontally, to symbolize the structural frame. The overhanging gables are accented by jigsaw curtain work, large brackets, or exposed framework, any of which casts a rich shadow on the plain, recessed wall. The main

purpose is to show off the wooden structure and its bracing members, as a form of structural "truthfulness."

In some areas, such as New York, the Stick style buildings are hard to find, because they have had their outside structures covered up with another form of siding.

French Second Empire: 1860 to 1885. One can spot Second Empire buildings by the high mansard roof, with the visible curb molding above and below, and the many ornate, characteristic dormers. These conspicuous dormers may take many forms or shapes, including oval or circular. The appearance of the lower level accentuates the mansard roof. Most Second Empire buildings are tall and sturdy looking.

Victorian Gothic: 1855 to 1890. Heavy, thick moldings, chimneys, and carved ornaments with as many different facets as possible give Victorian Gothic buildings an ornate and massive look. Towers, balconies, and ironwork are used at the roof level, often with a topheavy effect. Windows are mostly pointed Gothic, set back from all of the very busy outer wall work.

Queen Anne revival: 1874 to 1890. Queen Anne buildings may look like layered, iced wedding cakes, with many different building materials used on the walls. The chimneys are treated appropriately to give them the sculptured, molded-brick look. Round or polygonal turrets may be another interesting feature. The Queen Anne style presented many high roofs, meeting at right angles or at the turret. It is a combination of many periods, forming a potpourri. The windows' upper parts are treated with colored glass or molded into little squares.

Shingle style: 1880 to 1895. Derived from the Queen Anne trend, the Shingle style's outstanding feature is the use of the shingle on the roof and walls, to give them a uniform color and texture. The gambrel, hipped, or gable roof is seen quite frequently. As the name indicates, shingles may be used on such buildings almost anywhere.

Task 10. Divide the following verbs into 2 columns under the headings "Regular verbs"/"Irregular verbs". Write three forms of the irregular verbs.

To define, to group, to support, to show off, to divide, to take, to top, to symbolize, to give, to spot, to set back, to look, to see, to indicate.

Task 11. Make up sentences using the given words. Translate the sentences into Ukrainian. Mind the word order.

1. job, workers, will, thousands, of, industry, building, in, as, a, result, their, lose, the, of, cutbacks.

2. buildings, most, blocks, concrete, builders, used, 1960s, construct, office, to.

3. again, is, the, leaking, roof, mansard.

4. the, antique, vase, window, saw, of, an, I, in, shop, the.

5. a, given, they, look, new, the, have, completely, shop.

Task 12. Match the words with their definitions.

1) siding	a. a wooden or metal support fixed to or built into a wall to hold a shelf, lamp, roof, etc.
2) cupola	b. having flat shape with eight straight sides and eight angles
3) octagonal	c. each of a series of boards fixed so that they overlap on the side of a building to protect it from wind and rain
4) rectangular	d. shaped like a circle
5) square	e. protective material used to cover the outside walls of buildings
6) bracket	f. having a flat shape with four straight sides and four angles of 90°
7) clapboard	g. a type of rock formed of grains of sand tightly pressed together
8) sandstone	h. having a flat shape with many (usu 5 and more) straight sides and angles
9) polygonal	i. having four equal sides and four angles of 90°
10) rounded	j. a small dome forming a roof or part of a roof

Task 13. Read the text.

Contemporary Styles

Designer's personalized style: 1900 to the present. Constructed with the same materials used in the Matchbox Modern style, the outstanding feature of personalized houses is that they are built with design in mind, or to express the likes of the affluent individual owners or their architects. Most of the better-designed buildings in this category are not of any revival style, yet they are unusual in design.

Today's architects are trying to understand the spatial problems of a building and to create buildings without using any old styles or schools of thought. New types of material are now available that were not known in past centuries. These materials allow for an approach that is much more daring and risky — and is capable of achieving surprising results. Architects of today tend to think of a building not as an isolated structure but as part of the surrounding area.

Cape Cod style: 1920 to 1950. Cape Cods are very practical buildings. All of them have A-type frame roofs, which house the attic. Cape Cod houses were built with expansion in mind. Most people would purchase them with only the first floor finished; later, when the owners' needs demanded, they would finish the attic area. The outstanding feature of these buildings is windows with six-over-six panes. The house has a simple, compact look. The front can be broadside or gable. The siding materials used are clapboard, shingle, or brick.

Matchbox Modern style: 1960 to present. The Matchbox Modern style is a combination of various current forms; it is also the style that is at present used in many new communities throughout the country. Its basic feature, and the source of its name, is the box form, constructed of new materials, and sidings, with asphalt roofs. These buildings are erected with the idea of utilitarian use, economically constructed for the middle-class owner. All are box-shaped or else resemble two boxes put together. The building fronts have varied textures or balconies put on to decorate the facade. Most of these buildings are constructed by a contract builder, so that an area may have 25 or more of the same sort of homes. Areas may

feature what is called the duplex or townhouse. In areas of the country that are already heavily populated, few unattached homes are being built; if they are, they are two-family units. The package includes ready-to-use windows, doors, siding materials, and decorative ornaments. The siding can be brick veneer, asphalt or wood shingles, aluminum, cedar shake, or stone veneer, placed over plywood.

One-story or ranch type. Although we have come to refer to the one-story house as a ranch-type home, the wide variety of styles often bear little, if any, resemblance to an actual ranch house. Colonial, Oriental, Spanish, and modern styles of architecture have all been interpreted in the single-story home.

Even in a fairly small home, the exterior of the one-story design presents broad, low lines that have popular appeal. However, a ranch house requires a sufficient amount of ground to show it off to best advantage; it is not usually attractive when built on a small lot.

Split-level. A popular style that has developed in recent years has part of the house on the ground floor and the other parts on two or more other levels. There have been many interpretations of the split-level form, including some that are very poorly planned. However, when the house is well designed, the arrangement offers the practical advantages of conserving land and building expenses.

Although the split-level house would seem to be the answer to many problems, it can present problems of its own. The need to climb any steps at all may be a disadvantage in some situations. Also, it is a difficult house to design and to build. Usually, a split-level home looks more attractive on sloping terrain than on flat ground. The exterior proportions may have a chopped-up appearance, especially in small homes built on too little ground.

Two-story. For the economical use of ground and building materials, the house that is built up rather than spread out offers the most advantages. This form lends itself to a wide variety of treatments, ranging from basic economy models to luxurious formal dwellings.

Task 14. Explain in English the meaning of the following word combinations:

- a personalized house

- built with design in mind
- spatial problems of a building
- built with expansion in mind
- a middle-class owner
- a heavily populated area
- to have popular appeal
- poorly planned
- to bear little resemblance

Task 15. Open the brackets using the verb in the Present tense. Make up your own sentences with the words in italics.

1. She (to have) no particular *likes* or dislikes when it (to come) to food.
2. He always (to be) *daring* in his choice of clothes.
3. It (to be) very *surprising* to find that most of the museum's exhibits (to be) fakes.
4. The computer (to look) *compact* and functional.
5. The news quickly (to spread) *throughout* the country.
6. His *basic* problem (to be) is that he (to lack) confidence.
7. Bright posters (to *decorate*) the street.
8. The house (to have) a *sloping* roof.
9. The star (to own) a *luxurious* apartment in the center of London.
10. MBI (to agree) *to purchase* an additional 7 million of shares of Boxon stock.

Task 16. Find in the text antonyms to the following words:

safe (2 para.), sell (3 para.), monotonous (4 para.), interior (5 para.), ugly (5 para.), disadvantage (5 para.)

Task 17. Find in the text synonyms to the following words:

wealthy (1 para.), extraordinary (1 para.), enough (5 para.), pleasing (5 para.), land (6 para.), expensive (7 para.)

UNIT IX

SCULPTURE

"One must be entirely sensitive to the structure of the material that one is handling. One must yield to it in tiny details of execution, perhaps the handling of the surface or grain, and one must master it as a whole."

Barbara Hepworth (1903-1975), English sculptor.

Task 1. Make a list of words connected with the topic *Sculpture*.

Task 2. Memorize the vocabulary. Use every word (or word combination) in sentences of your own:

amalgam- суміш
to carve- висікати, витісувати
cohesion- зв'язок
durability- тривалість, стійкість
earthenware- кераміка
to flocculate- випадати
пластівцями
freestone- будівельне каміння
gesso – гіпс
grain- найменша частка
igneous- вогняний, вулканічний
indispensable- необхідний
limestone- вапняк
mica- слюда

odoriferous - ароматний
prehistoric- доісторичний
to retain- утримувати
saline- солоний
scale- масштаб
to seal - скріплювати
shrinkage- усихання
sedimentary- осадовий
slab- пластина
sleek, smooth- гладкий
to subject- піддати
tile- кахель

Task 3. Choose the synonymous group to the following words:

to immerse
indispensable
form
nevertheless
to resist
precision

exactitude, exactness, accuracy, fidelity
notwithstanding, however, still, yet
to dip, to plunge, to duck, to submerge
embellishment, adornment, trimming
fasten, secure, close, shut, settle
to withstand, to repel, to repulse, to rebuff

popular	to melt, to weld, to smelt, to liquefy, to solder
decoration	favoured, accepted, approved, admired
to seal	essential, necessary, vital, required
to fuse	shape, configuration, appearance, cast

Task 4. Give the antonyms to the following words:

Common, shrinkage, hardness, permanence, ancient, smooth, drying, loosely, connected.

Task 5. Match the words with their definitions. Tell what you know about these materials.

Clay, granite, mica, limestone, metal, marble, plaster, alabaster, soapstone.

1. A general term for sedimentary rocks composed mainly of calcium carbonate. It varies in hardness, some of which weather well and can be carved with precision.
2. Any hard limestone which can be sawn into thin slabs and will take a good polish so that it is suitable for decoration.
3. A white or yellowish white translucent stone, which is a type of gypsum found in England and Italy. Its softness makes it easy to carve, but also easily broken, soiled, and weathered.
4. A fine white or pinkish powder, made by the calcination or dehydration of gypsum, which when mixed with water forms a quick-setting paste that dries to form a uniform, solid, and inert mass. It is used in sculpture for making moulds and casts.
5. A variety of talc. It will take a smooth polish, and is so easily worked that it may even be carved with a knife. Its colour is dull greenish or bluish grey or sometimes brown. It is vulnerable to dampness in the atmosphere and will serve only for indoor sculpture.
6. Fine-grained, earthy materials that become plastic when wet.
7. Any crystalline, granular, unstratified igneous stone.
8. Aluminum and other silicate minerals. It is found usually in granite, either in scales or crystals.

9. A category of elements with supreme capacities for shape-shifting, physical strength, and weight.

Task 6. Read the texts.

Clay is a common name for a number of fine-grained, earthy materials that become plastic when wet. The individual clay particles are always smaller than 0.004 mm. Clays often form colloidal suspensions when immersed in water, but the clay particles flocculate and settle quickly in saline water. Clays are easily molded into a form that they retain when dry, and they become hard and lose their plasticity when subjected to heat.

From prehistoric times, clay has been indispensable in architecture, in industry, and in agriculture. As a building material, it is used in the form of brick, either sun-dried or fired.

Clays are also of great industrial importance, e.g., in the manufacture of tile for wall and floor coverings, of porcelain, china, and earthenware, and of pipe for drainage and sewage. Properties of the clays used in such products that must be taken into consideration include plasticity, shrinkage under firing and under air drying, fineness of grain, colour after firing, hardness, cohesion, capacity of the surface to take decoration.

Granite is a general term for any crystalline, granular, unstratified igneous stone which is an intimate amalgam of quartz, potash feldspar, and mica. Granite is of world-wide distribution and has many varieties, differing in texture and coarseness. It occurs in a wide range of colours--grey, green, rose, yellow--and the small scales of mica give it a lively sparkle. It takes a brilliant polish on a mirror-smooth surface but is one of the most difficult stones to carve because it is physically very compact; its ingredients are harder than ordinary steel. Nevertheless, its durability and resistance to weather have made it popular for monumental sculpture and at all times when permanence was valued, notably in ancient Egypt. Granite has been used comparatively little for sculpture on a small scale, since its properties preclude delicate carving.

Marble is a word loosely applied among masons and in the building trade to any hard limestone which can be sawn into thin slabs and will take a good polish so that it is suitable for decorative work, and in a stricter sense to metamorphosed limestones whose structure has been recrystallized by heat or pressure. Marbles are widely disseminated and occur in a great variety of colours and patterns, but certain types have been particularly prized by sculptors. It was much favoured in the Renaissance, particularly

by Michelangelo, who often visited the quarries to select material for his work. Neoclassical sculptors, such as Canova, also favoured it because of its ability to take a smooth, sleek surface.

Gesso is a glue-like paint, most often white, used as a base or undercoat when preparing a canvas for painting. Some types of gesso are extremely odoriferous. The gesso seals the pores in the canvas and provides a relatively smooth uniformly coloured surface for the artist to work on. Pre-gessoed canvases can be obtained commercially.

Gesso is also used by sculptors, to prepare the shape of the final sculpture (fused bronze) or directly as a material for sculpting.

"Gesso" is the Italian word for "chalk". A collection of gesso sculptures is properly called a gypsotheque.

Task 7. Answer the questions to the text:

- What is clay?
- Where can clay be used?
- What are the properties of clay?
- What is granite?
- What properties does granite possess?
- Where do people use granite?
- What is marble?

Task 8. Translate into English:

Скульптура – це мистецтво творити з твердого матеріалу (глини, гліпту, воску, дерева, каміння, металу) зображення людини, тварин та ін. предметів. Скульптурні зображення людини та тварин поділяються на два види: статуя та бюст (вільна фігура або верхня частина її) та рельєф (якщо фігура більше або менше ніж на половину занурена у плоский фон). Технічно виконання творів скульптури складається із створення моделі (ліплення з глини або воску), з першої моделі знімають форму з алебастру (формування), за формою відливають другу гіпсову модель (зліпок). З отриманням гіпсового зліпку основна частина художньої роботи скульптора завершується. Майстри та учні скульптора відтворюють гіпсовий зліпок на камінні (мармурі, базальті та ін.), у бронзі та ін. За допомогою молота, долота та різця створюється відповідна форма, а потім виконується більш

детальна обробка; сам скульптор за допомогою різця надає виліпленню необхідні риси.

UNIT X ERGONOMICS

Task 1. Check the pronunciation of the following words and word combinations. Memorize them.

anthropometry	антропометрія	physiology	фізіологія
anthropometri с	антропометричний	psychology	психологія
vision	зір	environmenta l factor	фактор отчуючого середовища
physicals fatigue	фізична втома		
efficiency	роботоспроможність , продуктивність	people's requirements	вимоги людей
human error	людська помилка	discipline	дисципліна
mental demand	розумова пореба	limb movement	рух кінцівок
equipment	обладнання, устаткування	accessibility	прийнятніст ь
scientific	науковий	sensory	сенсорний
engineering	техніка, машинобудування	acoustics	акустика

Task 2. Read the text.

What Is Ergonomics?

Ergonomics is the science concerned with designing safe and comfortable machines for humans.

Ergonomics is the application of scientific information concerning humans to the design of objects, systems and environment for human use. Ergonomics comes into everything, which involves people. Work systems, sports and leisure, health and safety should all embody ergonomics principles if well designed.

Why is the video recorder one of the most frustrating domestic items to operate? Why do some car seats leave you aching after a long journey? Why do some computer workstations confer eyestrain and muscle fatigue? Such human irritations and inconveniences are not inevitable – ergonomics is an approach, which puts human needs and capabilities at the focus of designing technological systems. The aim is to ensure that humans and technology work in complete harmony, with the equipment and tasks aligned to human characteristics.

Ergonomics has a wide application to everyday domestic situations, but there are even more significant implications for efficiency, productivity, safety and health in work settings. For example:

- ✓ Designing equipment and systems including computers, so that they are easier to use and less likely to lead to errors in operation – particularly important in high stress and safety-critical operations such as control rooms.
- ✓ Designing tasks and jobs so that they are effective and take account of human needs such as rest breaks and sensible shift patterns, as well as other factors such as intrinsic rewards of work itself.
- ✓ Designing equipment and work arrangements to improve working posture and ease the load on the body, thus reducing instances of Repetitive Strain Injury/Work Related Upper Limb Disorder.
- ✓ Information design, to make the interpretation and use of handbooks, signs, and displays easier and less error-prone.
- ✓ Design of training arrangements to cover all significant aspects of the job concerned and to take account of human learning requirements.
- ✓ The design of military and space equipment and systems – an extreme case of demands on the human being.
- ✓ Designing working environments, including lighting and heating, to suit the needs of the users and the tasks performed. Where necessary, design of personal protective equipment for work and hostile environments.

In developing countries, the acceptability and effectiveness of even fairly basic technology can be significantly enhanced.

The multi-disciplinary nature of ergonomics (sometimes called ‘Human Factors’) is immediately obvious. The ergonomist works in teams,

which may involve a variety of other professions: design engineers, production engineers, industrial designers, computer specialists, industrial physicians, health and safety practitioners, and specialists in human resources. The overall aim is to ensure that our knowledge of human characteristics is brought to bear on practical problems of people at work and in leisure. We know that, in many cases, humans can adapt to unsuitable conditions, but such adaptation leads often to inefficiency, errors, unacceptable stress, and physical or mental cost.

Task 3. Answer the questions to the text:

What is ergonomics?

What is the other name of ergonomics?

Ergonomics has limited applications, hasn't it?

Is ergonomics a multi-disciplined science?

Task 4. Fill in the gaps with the necessary prepositions:

Her beauty puts her ... the focus ... attention.	a. of
His childish behaviour may lead ... fatal errors.	b. of
You must take account ... his age when you judge his statement.	c. at
The lifesavers were to ease the load ... the car as soon as possible.	d. at
Our new boss makes tremendous demands ... the staff.	e. on
She adapted herself quickly ... the new climate.	f. on
Danger – men ... work! (i.e. on a road sign)	g. to
	h. to

Task 5. Make up questions to the underlined words.

1. The equipment in the photo studio is expensive.
2. We're keeping you here for your own safety.
3. Machines have replaced human labour in many industries.
4. John noted with some irritation that the gate had been left open.
5. He apologized for the inconveniences he had caused.

Task 6. Write down three forms of the following verbs. Make up your own sentences with them.

To leave, to put, to lead, to make, to know, to be, to come, to have, to bear.

Task 7. Fill in the blanks with the necessary form of the verb in brackets:

1. The book about vampires (to ensure) his success in the USA.
2. Some wines (to improve) with age.
3. The help of the UN experts (to ease) the transition to independence.
4. The number of staff (to reduce) from 40 to 25.
5. Much of the country (to cover) by forest.
6. Young people listened carefully to his report that (to concern) drug abuse.
7. The meeting will be held at the Conference Center. I hope that (to suit) all the delegates.
8. The doctor (to perform) that operation to save her life.
9. Flowers (to enhance) the beauty of a room.
10. Jane was on a diet which (to involve) eating nothing but fruit.

Task 8. Read the text.

The Components of Ergonomics

Ergonomics deals with the interaction of technological and work situations with the human being. The basic human sciences involved are anatomy, physiology and psychology, these sciences are applied by the ergonomist towards two main objectives: the most productive use of human capabilities, and the maintenance of human health and well-being. In a phrase, the job must 'fit the person' in all respects, and the work situation should not compromise human capabilities and limitations.

The contribution of basic anatomy lies in improving physical 'fit' between people and the things they use, ranging from hand tools to aircraft cockpit design. Achieving good physical fit is no mean feat when one considers the range in human body sizes across the population. The science of anthropometrics provides data on dimensions of the human body, in various postures. Biomechanics considers the operation of the muscles and

limbs, and ensures that working postures are beneficial, and that excessive forces are avoided.

Our knowledge of human physiology supports two main technical areas. Work physiology addresses the energy requirements of the body and sets standards for acceptable physical workrate and workload, and for nutrition requirements. Environmental physiology analyses the impact of physical working conditions – thermal, noise and vibration, and lighting – and sets the optimum requirements for these.

Psychology is concerned with human information processing and decision-making capabilities. In simple terms, this can be seen as aiding the cognitive ‘fit’ between people and the things they use. Relevant topics are sensory processes, perception, long- and short-term memory, decision making and action. There is also a strong thread of organizational psychology.

The importance of psychological dimensions of ergonomics should not be underestimated in today’s ‘high-tech’ world – remember the video recorder example at the beginning. The ergonomist advises on the design of interfaces between people and computers (Human Computer Interaction or HCI), information displays for industrial processes, the planning of training materials, and the design of human tasks and jobs. The concept of ‘information overload’ is familiar in many current jobs. Paradoxically, increasing automation, while dispensing with human involvement in routine operations, frequently increases the mental demands in terms of monitoring, supervision and maintenance.

David Whitfield and Joe Langford

From Blakemore C and Jennett S (eds) *The Oxford Companion to the Body* (Oxford University Press, 2001).

Task 9. Answer the questions:

How can the basic human sciences be involved in ergonomics?

(Dwell upon ergonomics and
anatomy,
anthropometrics,
biomechanics,
psychology)

2. What does it mean 'the job must fit the person'?

Task 10. Decide if the following statements are true or false. Correct the wrong ones.

Ergonomics considers interrelationship between working surrounding and people.

The basic human sciences involved are psychology, psychiatry and anatomy.

The science of anthropometrics presents information on the size of the human body.

Psychology deals merely with human info-processing.

Unfortunately, ergonomics is of little use in today's 'high-tech' world.

Task 11. Fill in the blanks with the necessary prepositions

1. It's really hard to deal ... such aggressive people.	a. on
2. New technology is being applied ... almost every industrial process.	b. in
3. Prices in this shop range ... \$10 ... \$500,000.	c. to
4. Satellites collect data ... weather patterns and transmit it back to earth.	d. of
5. Many of her movies were concerned ... social discrimination against women.	e. with
6. We pay our rent ... the beginning ... the month.	f. on
7. After retiring from professional athletics he was asked to advise ... the training of young athletes.	g. at
8. I explained the effect of that reform ... simple terms.	h. from
	i. to
	j. with

Task 12. Read the text

The Origins of Ergonomics. Modern Trends.

Ergonomics is a relatively new branch of science which celebrated its 50th anniversary in 1999, but relies on research carried out in many other older, established scientific areas, such as engineering, physiology and psychology.

It originated in World War 2, when scientists designed advanced new and potentially improved systems without fully considering the people who would be using them. It gradually became clear that systems and products would have to be designed to take account of many human and environmental factors if they are to be used safely and effectively. This awareness of people's requirements resulted in the discipline of ergonomics.

Product design. Even the simplest of products can be a nightmare to use if poorly designed. Our ancestors didn't have this problem. They could simply make things to suit themselves. These days, the designers of products are often far removed from the end users, which makes it vital to adopt an ergonomic, user-centred approach to design, including studying people using equipment, talking to them and asking them to test objects. This is especially important with 'inclusive design' where everyday products are designed with older and disabled users in mind.

Age related design. The number of people in the UK aged 75 and over is forecast to double over the next 50 years. As such, there is a need to extend the range of application of equipment, services and systems designed for the general population.

Data needs to be available on relevant aspects of the capability of the whole population including older and disabled people. The aspects include the physiological (for instance, range of limb movement, strength, vision, hearing) and the psychological (for example, cognitive, reaction time, memory). Anthropometric data is also required (size and shape ranges of people). With data such as this available, a knowledge base can be generated for access by conscientious designers.

Quality of life for older and disabled people may also be enhanced by improvements in the built environment. This includes design of the home, design of public access buildings and public spaces, and design and operation of transport systems. Physical aspects of design that need to be considered include stairs and ramps, hygrothermal conditions (cold, damp, heat), security and accessibility. Sensory aspects include acoustics, lighting, comfort, communication systems, signage and navigation.

Design of information. Much of today's human factors research and expertise is channelled towards improving the ways we use information. Virtually everyone has experienced the frustration of using computer software that doesn't work the way they expect it to. For the majority of end users of computer programmes, if the system is not working they have no

recourse but to call for technical help, or find creative ways around system. The development of easily usable human-computer interfaces is a major issue for ergonomists today.

Some years ago, researchers compared the relative positions of the controls on a lathe with the size of an average male worker. It was found that the lathe operator would have to stoop and move from side to side to operate the lathe controls. An 'ideal' sized person to fit the lathe would be just 4.5 feet tall, 2 feet across the shoulders and have an arm span of 8 feet.

This example epitomises the shortcoming in design when no account has been taken of the user. People come in all shapes and sizes, and the ergonomist takes this variability into account when influencing the design process.

The branch of ergonomics that deals with human variability in size, shape and strength is called anthropometry. Tables of anthropometric data are used by ergonomists to ensure that places and items that they are designing fit the users.

Task 13. Choose the option, which corresponds to the information presented in the text.

1. Ergonomics as a branch of science appeared in
 - a. 1949
 - b. 1950
 - c. 1999
2. Our ancestors
 - a. had to think of equipment designed for the general population
 - b. made things to suit themselves
 - c. had problems with poorly designed products
3. Anthropometric data includes
 - a. memory
 - b. range of limb movement
 - c. size and shape ranges of people
4. Quality of life for older and disabled people may be improved taking into account
 - a. the design of stairs
 - b. the design of ice cream packaging

- c. the design of stationery
- 5. Nowadays human factors research is directed at
 - a. increasing the speed of typing
 - b. bettering the ways we use information
 - c. influencing people to buy new furniture

Task 14. Translate the following word combinations into Ukrainian:

Primary channel for information, work area, insufficient lighting, to suffer eyestrain, warning signal, emergency situation, physical fatigue, nuclear and chemical industry, air traffic control, to pay attention to demands, to misread information, to operate wrong controls.

Task 15. Read the text.

Options to Consider in Ergonomics

Vision is usually the primary channel for information, yet systems are often so poorly designed that the user is unable to see the work area clearly. Many workers using computers cannot see their screens because of glare or reflections. Others, doing precise assembly tasks, have insufficient lighting and suffer eyestrain and reduced output as a result.

Sound can be a useful way to provide information, especially for warning signals. However, care must be taken not to overload this sensory channel. A recent airliner had 16 different audio warnings, far too many for a pilot to deal with in an emergency situation. A more sensible approach was to have just a few audio signals to alert the pilot to get information guidance from a visual display.

Job design. One goal of ergonomics is to design jobs to fit people. This means taking account of differences such as size, strength and ability to handle information for a wide range of users. Then the tasks, the workplace and tools are designed around these differences. The benefits are improved efficiency, quality and job satisfaction. The costs of failure include increased error rates and physical fatigue - or worse.

Human error

In some industries the impact of human errors can be catastrophic. These include the nuclear and chemical industries, rail and sea transport and aviation, including air traffic control.

When disasters occur, the blame is often laid with the operators, pilots or drivers concerned - and labelled 'human error'. Often though, the errors are caused by poor equipment and system design.

Ergonomists working in these areas pay particular attention to the mental demands on the operators, designing tasks and equipment to minimize the chances of misreading information or operating the wrong controls, for example.

Task 16. Answer the questions

What physical aspects should be considered in design?

What do sensory aspects include?

Why don't computer users see their screens sometimes?

One shouldn't abuse warning signals, should they?

What does it mean 'to design jobs to fit people'?

What are the benefits of ergonomic design?

What is the cost of failure in job design?

Task 17. Make up derivatives of the words below using the given affixes: *un-*, *in-*, *out-*, *over-*, *-ful*, *-ly*, *mis-*. Translate the words and their derivatives into Ukrainian.

Poor, able, especial, to read, put, usual, sufficient, use, to load

UNIT XI

PHOTOGRAPHY

Task 1. Read the text.

The Daguerreotype

This was a positive image on a metal support. The Daguerreotype was the first successful photographic process, the discovery being announced on 7 January 1839. The process consisted of

- exposing copper plates to iodine, the fumes forming light-sensitive silver iodide. The plate would have to be used within an hour.

- exposing to light - between 10 and 20 minutes, depending upon the light available.

- developing the plate over mercury heated to 75° Centigrade. This caused the mercury to amalgamate with the silver.

- fixing the image in a warm solution of common salt (later sodium sulphite was used.)

- rinsing the plate in hot distilled water.

The quality of the photographs was stunning. However, the process had its weaknesses:

- the pictures could not be reproduced and were therefore unique;

- the surfaces were extremely delicate, which is why they are often found housed under glass in a case;

- the image was reversed laterally, the sitter seeing himself as he did when looking at a mirror. (Sometimes the camera lens was equipped with a mirror to correct this);

- the chemicals used (bromine and chlorine fumes and hot mercury) were highly toxic;

- the images were difficult to view from certain angles.

Carl Dauthendey, a photographer who became the first professional daguerreotype photographer in St. Petersburg, makes an interesting comment on the way Daguerreotypes were viewed:

"People were afraid at first to look for any length of time at the pictures he produced. They were embarrassed by the clarity of these figures and believed that the little, tiny faces of the people in the pictures could see

out at them, so amazing did the unaccustomed detail and the unaccustomed truth to nature of the first daguerreotypes appear to everyone"

There was clearly a need to find some more effective ways of reducing the exposure time:

- On the chemistry side, J.G. Goddard started using bromide as well as iodine to sensitise plates, while Antoine Claudet experimented using chlorine.

- On the optical side, J. M. Petzval invented a portrait lens with an aperture of f3.6 (as opposed to f14, which was currently being used.) Petzval's lens was still being widely used almost a century later.

Taken together, these improvements enabled photographers to use exposures of between ten and thirty seconds, thus making portraiture more of a practical proposition.

The daguerreotype, aptly called a "mirror with a memory", was an amazing development, and one cannot but marvel at the intricacy of the detail. However, it was a blind alley as far as photography was concerned.

Task 2. Answer the questions to the text:

What is the Daguerreotype?

When was the discovery of this photographic process announced?

What did the process consist of?

What weaknesses did Daguerreotype have?

Why were people afraid to look at the Daguerreotype pictures?

What improvements enabled photographers to reduce the exposure time?

How is the Daguerreotype also called?

Task 3. Read the text.

The Calotype Process

The Calotype was a positive/negative process introduced in 1841 by Fox Talbot, and popular for the next ten years or so. Strictly speaking the term refers only to the negative image, but it is commonly taken to mean both.

A piece of paper was brushed with weak salt solution, dried, then brushed with a weak silver nitrate solution, dried, making silver chloride in the paper. This made it sensitive to light, and the paper was now ready for exposure. This might take half an hour, giving a print-out image. It was fixed in strong salt solution - potassium iodide of hypo.

In 1844 Fox Talbot opened a photography establishment in Reading in order to mass produce prints.

To make a print, the negative was placed on top of more photo paper, laid flat in a glass frame, and allowed to develop in sunlight.

The Calotype process was not as popular as its rival one, the Daguerreotype. There were various reasons for this:

- its popularity was to a great extent arrested by patent restrictions;
- the materials were less sensitive to light, therefore requiring longer exposures;
- the imperfections of the paper reduced the quality of the final print; Calotypes did not have the sharp definition of daguerreotypes.
- the process itself took longer, as it required two stages (making the negative and then the positive);
- the prints tended to fade.

One might also suggest that the fact paper was used as a negative lessened the detail of the picture, though from an artistic point of view some would regard this as a desirable feature.

However, the calotype also had its advantages compared with the daguerreotype:

- it provided the means of making an unlimited number of prints from one negative;
- retouching could be done on either negative or print;
- prints on paper were easier to examine, and far less delicate;
- the calotype had warmer tones.

When the Collodion process was introduced in 1851, the calotype became obsolete. However, the negative-positive process was one day to become the standard photographic one, which is still used today.

Task 4. Say if the following statements are true or false according to the text. Correct the wrong ones.

1. Fox Talbot introduced the Calotype process in 1941.
2. The Calotype process was as popular as the Daguerreotype.

3. The Calotype process required two stages (making the negative and then the positive).
4. Calotype prints tended to fade.
5. The Calotype provided the means of making only 2 prints from one negative.
6. The Calotype had colder tones than Daguerreotype.

Task 5. Read the text.

Carte-de-Visite Photography

Cartes-de-visite were small visiting card portraits (usually measuring 4 1/2 x 2 1/2") introduced by a Parisian photographer, Andre Disderi, who in late 1854 patented a way of taking a number of photographs on one plate (usually eight), thus greatly reducing production costs. (He was not actually the first to produce them; this honour belongs to an otherwise obscure photographer called Dodero, from Marseilles).

Different types of cameras were devised. Some had a mechanism which rotated the photographic plate, others had multiple lenses which could be uncovered singly or all together.

The carte-de-visite did not catch on until one day in May 1859 Napoleon III, on his way to Italy with his army, halted his troops and went into Disderi's studio in Paris, to have his photograph taken. From this welcome publicity Disderi's fame began, and two years later he was said to be earning nearly J50,000 a year from one studio alone. *

In England carte-de-visite portraits were taken of Queen Victoria and Prince Albert. One firm paid a small fortune for exclusive rights to photograph the Royal Family, and this signalled the way for a boom in collecting pictures of the famous, or having one's own carte-de-visite made. It is said that the portraits of Queen Victoria and the Royal Family taken by John Mayall sold over one hundred thousand copies.

Other public figures were often persuaded to sit. Helmut Gernsheim, a writer on the history of photography, comments that they were called "sure cards" because one could be sure that each time a famous person consented to sit, a small fortune would go to the photographer!

During the 1860s the craze for these cards became immense. Sometimes the profits could be huge. By the way, pirating of someone else's work is not new; some firms copied the photograph of a famous person and made quite a healthy living!

The reasons for the success of these cards were

- their cheapness,
- they were small, light and easy to collect, and many people began to place these in photographic albums
- collections of pictures, particularly of royalty, became highly treasured

The props used in cartes-de-visite seemed to follow certain fashions; starting off with balustrades and curtains, they moved to columns (sometimes resting on the carpet!) bridges and stiles, hammocks, palm-trees and bicycles. Sadly, quantity rather than quality was the order of the day, though there are some striking exceptions.

* This story about Napoleon stopping for a portrait has subsequently shown to be untrue, but it makes a good story and may have been put about purely for publicity purposes!

Task 6. Answer the questions to the text:

1. Who was the first to produce cartes-de visite?
2. How were the cartes-de-visite also called? Why?
3. When did the craze for these cards become immense?
4. Were the cartes-de-visite unprofitable?
5. Were the cards cheap?
6. What was usually shown on the cards?

Task 7. Read the text.

Film

The first photographic film is credited to John Corbitt*, an Englishman working in Philadelphia, who in 1888 coated sheets of celluloid with photographic emulsion. The following year George Eastman

produced roll film, designed for a new camera called the Kodak; after exposure the film would be returned still in the camera for processing.

Daylight loading film was produced by Eastman Kodak in 1894.

The early films were highly inflammable, and gradually became replaced by non inflammable cellulose acetate in the 1930s. Cine projection seemed to be a pretty hazardous business, if the advice to users printed in *New Photographer*, 2 January 1926 is anything to go by:

"Choose a room with more than one exit door if possible, and make sure that the windows can be easily opened in the event of the film charring and beginning to emit smoke, as this smoke is poisonous... Keep a bucket of damp sand close by the projector, and at the first sign of a flare-up throw the machine on the bare floor and tip the sand all over it. If this is done smartly without fuss, and if the people are at once got out of the room and the windows opened, no great harm will accrue beyond the destruction of the film..."

*Well, it depends where you look! One book states that the idea of a paper roll film was first conceived by Arthur James Melhuish in 1854. Even more interesting is the story of Revd. Hannibal Goodwin, which clearly suggests that Eastman Kodak had made a claim to inventing film that was unjustified.

Task 8. Make up three questions of different types to the text.

Task 9. Match the words with their definitions:

1. emulsion <i>n</i>	a) to allow light to reach film, esp by using a camera
2. camera	b) that can very easily catch fire and burn
3. expose <i>v</i>	c) a substance on the surface of photographic film that is sensitive to light
4. film <i>n</i>	d) a roll or sheet of thin flexible plastic that is sensitive to light, for use in photography
5. inflammable <i>adj</i>	e) e. an apparatus for taking photographs

Task 10. Read the text.

Photographing Babies

Before you know it, your baby will have left the crib for the classroom. Make picture-taking a part of your lifestyle so you can catch all those amazing firsts. We can help you take pictures you'll want to share with friends and relatives and treasure for years to come.

Catch each step of baby's development—the first smile, the first bath, the first tooth, the first step. Babies change so rapidly, make sure you capture all the milestones before they become history. Or show a day in the life of baby. From the morning's waking stretch to the evening's yawns, track your child for one full day. You'll have a series you'll cherish for years to come.

Capture feelings. A smirk, a frown, a wail - capture all the emotions, not just the pretty smiles. Babies are uninhibited and uncensored. Show it in your pictures.

Get close. Fill the camera's viewfinder or LCD display with your subject to create pictures with greater impact. Step in close or use your camera's zoom to emphasize what is important and exclude the rest. Check the manual for your camera's closest focusing distance.

Try different angles. Start by shooting at the baby's eye level. Prop the baby on someone's shoulder. Or line up several wee ones on the sofa. Then try something different - stand on a (sturdy!) chair and shoot down at the baby in the crib.

Include other people in pictures. Capture others with the baby - Big Sister feeding the baby, Grandpa dancing with his baby granddaughter. Or introduce two babies to each other and catch that instant bonding in their eyes.

Use a simple background. An uncluttered background focuses attention on the subject, resulting in a stronger picture. Place your subject against a plain, non-distracting background. Alternatively, sometimes just moving yourself (and the camera) a few feet one way or the other can eliminate distractions from view.

Use natural light. You may be surprised to learn that cloudy, overcast days provide the best lighting for pictures of people. On overcast days, the soft light flatters faces. Indoors, try turning off the flash and use the light

coming in from a window to give your subject a soft, almost glowing appearance. Indoors, try turning off the flash and use the light coming in from a window to give your subject a soft, almost glowing appearance.

Turn your pictures into greeting cards. Create greeting cards of your cherished pictures to share with family and friends, from photo birth announcements to a commemoration of the first crawl.

Task 11. Answer the questions to the text:

Why is it difficult to take photos of babies?

What background focuses attention on the subject?

How can you emphasize what is important?

What is the best lighting for pictures of people?

Task 12. Enumerate the tips for photographing babies.

Task 13. Say if the statements are false or true according to the text. Correct the wrong ones.

Babies change slowly so you'll have time to capture all the milestones of their lives.

Show in your pictures just the pretty smiles.

Take as many photos as possible at the same angle.

Place your subject against a plain background.

Cloudy days provide the worst lighting for pictures of people.