SECTION 5

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Botany	page	118
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Experiments on human beings	page	121
Human anatomy	page	124
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BIOLOGY



KITS

IED ITEMS 250 ml beaker Test-tubes holder Capillary tube Pencil dropper Enlarger, 7x Aluminum foil Filter paper sheets Pincers Scalpel Scissors Graduated cylinders, 100 ml Glass tube Sachet of seeds Plugs-piercer Funnel Spatula Jars for crops Rubber plug with hook A4 thin cardboards SUPPLIED ITEMS

Peat discs Mortar and pestle Plastic bags Section of stem

Section or stem Petri dishes Test-tubes with plug Jars with plug Plastic bag Elastic Bottle of mixture for chromatography Pattle of mixture for chromatography

Bottle of vaseline Bottle of Lugol's solution Bottle of fertilizer Bottle of sand

Straw Test-tubes with plug

Test-tubes with plug Jars with plug Bottle of calcium sulphate Bottle of calcium sulphate Bottle of calcium sulphate Bottle of dimantured alcohol Bottle of standung Bottle of standung Bottle of stand Bottle of stand Bottle of hydrocen albumin Bottle of hydrocen peroxide Bottle of hydrocen peroxide Bottle of biuret Bottle of biuret Baking soda's bottle Experiments guide Small case

1 10

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Bottle of sand Bottle potassium permanganate Bottle of distilled water Bottle of denatured alcohol Experiments guide Small case

255

1

1

1 1

5674

5674 | DISCOVERING THE PLANT KINGDOM

20 experiments

CONTENTS

- 1. The roots: osmosis
- 2. The roots: roots-hair
- 3. The roots orientate
- 4. The stem: morphology 5
- Underground stems 6.
 - The stem: the capillarity
- 7. The leaf: the chlorophyll 8. The leaf: the photosynthesis
- 9. The leaf: the perspiration 10. The leaf: the starch
- 10.
- 11. The flower: morphology
- The newer morphology
 The seed: morphology
 The seed: germination
- 14. The fruit: the pulp
- 15. Carbon dioxide development 16. Construction of an herbarium



SUPPLIED ITEMS 1 250 ml beake

1	Test-tubes holder
1	Pencil dropper
1	Magnification lens, 3x
1	Capsule Ø 60 mm
1	Pincers
1	Scalpel
1	Scissors
1	Teaspoon
1	Set of three shells and two insects
1	Black paper sheet
1	Funnel
1	Gauze
1	Rubber teat
1	Basin
1	PH indicator, 1-10
1	Humidifier
1	Stickers sheet
5	Petri dishes

5675 DISCOVERING THE ANIMAL KINGDOM

20 experiments

CONTENTS

- 1. The annelids
- Molluscs 2.
- 3. Molluscs' shells
- 4. Insects
- Insects' development 5
- Mammals' traces 6.
- 7. Digestion of starch
- 8. Digestion of fats
- Digestion of proteins 9.
- 10. Enzymes
- 11. Taste buds
- 12. Breathing
- 13. PH and organic reaction

To perform the experiments on digestion of fats and proteins it is necessary to buy pepsin and pancreatin in a pharmacy.

5675



5630 THE PLANTS

33 experiments

CONTENTS

- Roots classification 1. 2. The roots: osmosis
- 3. The roots: roots-hair
- 4. Roots orientate
- 5. Stem's classification 6. The stem: morphology
- Underground stems 7
- The stem: capillarity 8.
- 9. The leaf: chlorophyll
- The leaf: photosynthesis 10.
- The leaf: perspiration 11.
- 12. The leaf: starch

- The flower: morphology 13.
- 14. The flower: reproductive organs
- 15. The weeds
- Ferns musks lichens 16.
- 17. Fungus - moulds - yeats
- Morphology of the seed 18.
- Seed's classification 19
- Fruits' classification 20.
- 21. The fruits: pulp
- 22. Carbon dioxide's development
- Vegetables' stored substances 23.
- 24 Vegetables' classification

Beaker, 250 mi
Beaker, 400 ml
Beaker, 600 ml
Graduated cylinder 250 m
Test-tubes 16v160 mm
Solid plugs for test-tubes
Tost tubes holder
Capillany glass tuba
Capillary glass tube
Ruler
Tripod support
Glass tube
Test-tubes,20x200 mm
Clock glasses, Ø 60 mm
Pencil dropper
Alcohol burner
Flame-scattered grid
Portable microscope
Enlarger, 7x
Aluminum sheet
Endosmometer
Wooden nincer
Colourings for microscopy
Diastic base
Flastic Days
Filter paper sneets
Handle needle

SUPPLIED ITEMS

1

Pincer Scalpel Scissors Funnel Pipette Graduated cylinder, 100 ml Glass tube Sachets of seeds Jars for culture Jars for culture Plugs-piercer Ground and seeds container Peat discs Pack of sample-holder slides Pack of sample-cover slides 30 Mortar and pestle Mortar and pestle Rubber plug with hook Drying frame Humidifier Steel pivots Punctured plexiglas disc Plastic bans Plastic bags Stickers sheets Dried plants Stem sample, vertical section Stem sample, horizontal section 10

1 2

1

3

etri dishes
ars with plug
ottle of soluble starch
ottle of Fehling A
ottle of Fehling B
ottle of hiuret
ottle of distil water
ottle of depatured water
ottle of Cuden III
ottle of Sudan III
ottle of sodium chloride
ottle of methylene blue
ottle of nutrient agar
ottle of rose bengal agar
ottle of fertilizer solution
ottle of mixture for
bromatography
ottle of sand
attle of June l'e selution
0111P 01 1 1000 S SOUTION

10

KITS

Bottle of Vaseline Experiments guide Small cases



ANIMALS AND HUMANS 5631

35 experiments

CONTENTS

- 1. The protozoa
- 2. The annelids
- The shellfishes 3.
- The molluscs 4.
- 5. Molluscs' shells
- The insects 6.
- 7.
- Insects' development
- The anthill 8.
- 9. Anatomy of the fish
- 10. Habitat e life conditions
- 11. Animal cells
- 12. Glandular tissues

- 21. Skeleton
- Skin appendages: fishes and reptiles
- Thermal insulation: birds and mammals 23.
- The pH and the organic reactions

Beaker, 250 ml
Beaker, 400 ml
Beaker 600 ml
Test-tubes,16x160 mm
Plugs for test-tubes
Test-tubes holder
Thermometer, -10 +110OC
Tripod support
Pencil dropper
Alcohol burner
Flame-scattering grid
Pocket microscope 60-100x
Magnification lens 3x
Funnel
Capsule, Ø 60 mm
Spoon with spatule
Agitator
Paper filter discs
Insect collector
Colourings for microscopy
Colourings for microscopy

SUPPLIED ITEMS

Pince

Scalpel

10

1

Aereator with tube Aereator with tube Pack of slides for samples Black paper sheets Shells collection Insects' collection Set of slides, coats, plumes, flakes Gauze Rubber teat Punctured plexiglas disc PH indicator, 1-10 1 PH indicator, 1-10 Peat discs Pack of sample-holder slides Pack of sample-cover slides Slide with hollow Humidifier Stickers sheets Petri dishes Jars with plug Trasparent tube in PVC Bottle of Lugol's solution 10

Aquarium - ground container with cover Basin for dissection Pipettes

Bottle of starch Bottle of ammonia Bottle of distil water Bottle of sodium hydrate Bottle of denatured alcohol Bottle of methylene blue Bottle of methylene blue Bottle of hydrochloric acid Bottle of hydrochloric acid Bottle of hydrochloric acid Bottle of sodium carbonate Bottle of sodium carbonate Bottle of NaCl, 0,9 % Bottle of NaCl, 6 % Bottle of sodium arbonate of soda Bottle of bicarbonate of soda Experiments guide Small cases

Advanced level

To perform experiments on digestion of fats and proteins, it is necessary to buy pepsin and pancreatin in a pharmacy.



Muscle tissues 13. 14. Digestion of starch

- Digestion of fats 15.
- Digestion of proteins 16
- 17. Enzymes Blood 18.
- Osmotic pressure
- 19.
- 20. Respiration
- 22.
- 24.



BOTANY













BOTANY

5660 PLANT PHYSIOLOGY **10** experiments SUPPLIED ITEMS Test-tube, 30x3 mm Three-necked Woulff's flask, 500 ml Glass tubes with tap and plug This kit includes all the items previously described. Repeated items have been eliminated in order to reduce total cost.

CONTENTS

- 1. Introduction: atmospheric pressure
- Respiration in germinating seeds1 2.
- Heat production in germinating 3. seeds
- 4. Respiration in germinating seeds 2
- Absorption of oxygen in plants 1 5
- Absorption of oxygen in plants 2 6.



- 8. Dutrochet's endosmometer 9. Radical pressure
- 10. Water rise in plants due to
- transpiration
- 11. Absorption of minerals in plants

- Funnel
- runnei Round-bottomed flask, 500 ml Thermometer with plug Three-necked glass tube with plug Capillary tube, 300 mm with white plate and

1

- Glass tube Findosmometer Metallic bar Pincers with clamp Suction pump Bottles of distilled water 1

1100

- Bottle of water barite Beaker, 600 ml Aluminum tripod support Test-tube, 16x160 mm Clamp, Ø 13 mm Flasks, 250 ml Ring support Bar, 25 cm Pair of tubes with tap Blower
- Blowe
- Bower Bottle of caustic potash Bottle of sodium chloride Bottles of coloured liquids Bottles of fertilizers
- Experiments guide Small case

7212

Germinatie

ī

5660

HS2850

7212 Potometer

Item for measuring the plants' water absorption speed. It consists of a bottle for water, a glass support for plants and a graduated tube for measuring.

HS2850 Model of germination

On this model in relief the germination of monocots and dicots plants is shown. The students can notice the similarities and the differences in seed's development according to both cases. Fitted with english teaching guide and coloured transparent sheets. Size: 62x46 cm.

MBT004 Peach blossom

This model shows the basic structure of the peach blossom: the receptacle, the calyx, the corolla, the stalk and the pistil. The ovary can be opened, showing the two pendulum ovules and the placenta. Diameter: 35 cm.

T21019 Modular cherry blossom with fruit

This model shows the cherry blossom (decomposable in 3 parts) enlarged 7 times and the fruit enlarged 3 times. The wrapper which contains the seeds can be extracted. Height: 32,5 cm.

T21016 Apple blossom

This model shows the features of a typical apple blossom, enlarged 5 times. Height: 46 cm.

MBT006 Root

This model shows the morphology of a root's cross and longitudinal sections, its internal structure included. Size: 60x20x17 cm.



BOTANY - ZOOLOGY



TE04

7008















MBT005 Dicotyledon's stem

This model shows the histological structures of a dicotyledon's stem in the cross and longitudinal section. Size: 48x20x10 cm.

MBT022 Pollination process

Model of angiosperm flower which shows the process of its dual pollination. Size: 33x26x3 cm.

MBT007 Leaf

H20

7007

This model shows the vessels and the internal and external structure of a leaf. Cross and longitudinal sections. Size: 46x29x16 cm.

TE07 pH meter for soil

To measure soil's acidity degree.

TE08 Igrometer for soil

To measure soil's humidity degree. With buil-in light meter to check if plants are correctly exposed to light.

TE04 Germination fay

Made of plastic with plexiglas transparent cover with two boles. Size: 35x23x20h cm.

Transparent plastic basin Size: 18x11x14 cm, with cover.

Landing net

Suitable for collection of small fishes and insects. Length: 32 cm.

7008 Dissection table

It consists of a metallic plane covered by a washable layer. Size: 28x20 cm.

7006 Insects collector

It consists of a transparent plastic container with cover, equipped with two transparent small flexible tubes.

7 Berlese's selector

Item for the extraction of microartropodes from soil's samples. The lamp progressively dries up the soil and there are the animals move to the bottom, they go through the support net and fall in the alcohol solution that fix them. For the observation of this fauna, the stereomicroscopes mentioned on pages 150-151 are particularly indicated.

HS2057 Animal and plant cell with activity set

These are two decomposable models which permit to explore the structure and the functions of the animal and plant cells. It is fitted with coloured transparent sheets and with an english teaching guide. Models' diameter: 20,5 cm.

HS2055 Animal Cell

Model of cell that allows to explore the structure and functions of the animal cell.

HS2056 Plant Cell

Model of cell that allows to explore the structure and functions of the plant cell.



EXPERIMENTS ON HUMAN BEING



EXPERIMENTS ON HUMAN BEINGS

5719 EXPLORING OUR SENSES

The sense organs are the instruments through which the body can receive and process the stimuli coming from outside. With the material provided in this collection teachers can enrich their lessons through the exhibition of sense organs' models and conducting meaningful experiments, on physical and chemical stimuli. Even the students, divided into six working groups, can perform simple experiments through which: - they acquire the knowledge that every sensation contributes to the perception of the

- outside world;
- they learn to distinguish the information coming from each sense;
- they learn the potentialities and limits of their sense organs and the hygienic standards for their correct use;
- they understand the importance of the connection between the sense organs and the brain in perception.

NOTICE

To perform the experiments on eye and its defects, it is necessary to have a magnetic blackboard because the pentalaser and the five lenses are magnetized.

the purchase of the blackboard code 1329 is suggested, it can be hung on a wall or placed on a table .

SUPPLIED ITEMS 1 Linear ruler 6 Droppers 1 Tuning fork with case and small hammer 1 Vibrating plate 5 Stetoscope 1 Ultrasonic whistle Xylophone Electrical Newton disc 6 Stereoscopic glasses 8 Binoculars 6 Magnification lenses	1 Solar energy motor 1 Batteries-holder 2 Connection cables 6 Plastic tubes 1 Kit for the study of eyes and its defects 1 Ink pad 1 Kit of different items 6 Anti-acoustic pannels 1 Kit of different substances 1 Tastes' kit 1 Punctured aluminum plate 1 Small sphere with wire	Digital thermometer Model of eye Model of skin Model of skin Model of rose Petri dishes 3 250cc beakers Tables on eye's strucure Tables on resolving power of the eye Snellen chart	6 Tables on eye blind spot 6 Tables on images' persistence 6 Tables on spatial synthesis of colours 6 Tables on spotal synthesis of colours 6 Tables on geometrical optical illusions 6 Tables on chromatic optical illusions 7 Tables with Braille's alphabet 8 Sheet 9 Sheet 1 Small case 1 Experiments guide



CONTENTS

TOUCH

- 1° THE SKIN
- 2° SKIN'S SENSIBILITY
- 3° TOUCH'S STIMULI
- 4° PRESSURE'S STIMULI
- 5° PAIN'S STIMULI
- TEMPERATURE & HEAT 6°
- THERMAL STIMULI HOT AND COLD RECEPTORS 7° 8°
- 99 TO SEE THROUGH THE TOUCH
- 10° THE FINGERPRINTS
- 11° THE SKIN'S HYGIENE

SIGHT

- LIGHT SOURCES AND ILLUMINATED BODIES 1°
- 2° LIGHT PROPAGATION
- 3° LIGHT TRANSPORTS ENERGY THE EYE: A LIGHT'S RECEIVER
- 4° 5° LENSES
- THE EYE AS AN OPTICAL SYSTEM EYES' DEFECTS AND THEIR CORRECTION 6° 7°
- , 8° RESOLVING POWER OF THE EYE AND VISUAL ACUITY

- 9° THE EYE-BRAIN SYSTEM 10° THE PERSISTENCE OF IMAGES ON THE RETINA
- 11° TEMPORAL SYNTHESIS OF COLORS
- 12° SPATIAL SYNTHESIS OF COLORS
- 13° BINOCULAR VISION
- 14° SENSE OF DEPTH
- 15° STEREOSCOPIC VISION
- 16° FIELD OF VIEW
 - 17° OPTICAL ILLUSIONS 18° HOW TO HELP THE SIGHT

OLFACTION

- WHAT'S THE MATTER LIKE THE MATTER'S AGGREGATION STAGES 1° 2°
- 3° CHANGES OF STATE 4° THE NOSE: THE ORGAN OF SMELL
- 5° HOW SMELLS ARE DETECTED
- 6° HOW SMELLS ARE IDENTIFIED
- 7° 8° HOW WE GET USED TO SMELLS
- THE NOSE'S HYGIENE

TASTE

- THE TONGUE AND THE TASTE BUDS 1° 2°
- HOW WE FEEL DIFFERENT TASTES

- THE FOUR MAIN TASTES TASTE AND OLFACTION 39
- 4° 5° THE TASTE AND THE SIGHT
- 6° GOOD AND BAD SMELL

HEARING

- THE OSCILLATING MOTION 1°
- 29 GRAPHICAL REPRESENTATION OF THE OSCILLATING MOTION
- 3° WHEN WE HEAR A SOUND Δ°
- WHY WE HEAR THE SOUNDS ۶°
- ACOUSTIC WAVES 6°
- HOW THE ACOUSTIC WAVES TURN INTO SOUNDS THE FAR: A RECEIVER OF ACOUSTIC WAVES THE EAR-BRAIN SYSTEM
- 7°
- , 8°
- THE LIMITS OF AUDIBILITY ٩° 10° THE DISTINCTIVE FEATURES OF SOUND
- 11° THE SENSIBILITY OF AUDITORY APPARATUS
- 12° HOW TO REINFORCE THE AUDITORY SENSIBILITY
- 13° THE STEREO PHONICS
- 14° ECHO, REVERBERATION AND BOOM
- 15° CURE OF AUDITORY APPARATUS

70 EXPERIMENTS











EXPERIMENTS ON HUMAN BEING

HUMAN ANATOMY

The sets mentioned in this section include a plastic table in relief, some transparent sheets for overhead projector and a teaching guide which consists of: a general introduction, an explanation on how to use the model, some questions to ask the students and their answer and in the end a legend-glossary.









HS2674



is fitted with english teaching guide and transparent sheets. Size: 62x46 cm. HS2672 Breathing apparatus Protruding model of breathing system which gives a sectional view of the sl

Protruding model of breathing system which gives a sectional view of the skull and of the human torso, of the bronchial tube and of the pulmonary alveolus. It is fitted with three transparent sheets which clearly show the connection between breathing and anatomical adjacent structures, and an english teaching guide. Size: 46x62 cm.

Protruding model of circulatory system which gives a sectional view of the internal structure of heart, of kidney, of an artery and of the blood vessels that go through the human body. It

SET OF TEACHING ACTIVITIES

HS2673 Digestive system

HS2671 Circulatory apparatus

Protruding model of the digestive system that gives a sectional view of the mouth, of the salivary glands, of the oesophagus, of the stomach, of the pancreas and of the intestine. It is fitted with transparent sheets and with an english teaching guide. Size: 46x62 cm.

HS2674 Nervous apparatus

Protruding model of nervous system which gives a sectional view of the brain, of the spinal cord and of the spinal nerves with dendrites and synapses. It is fitted with transparent sheets and english teaching guide. Size: 62x46 cm.

HS2675 Urinary tract

Protruding model of urinary tract in which the kidney is shown in details, illustrating an enlarged nephron. Other highlighted elements are the bark, the pyramid, the calyx and the papilla. It is fitted with transparent sheets and english teaching guide. Size: 62x46 cm..

HS2667 Mitosis

Protruding model that illustrates the somatic cell division, carefully describing the 5 phases of mitosis. Some important structures are highlighted, such as cytoplasm nucleus, nucleolus, chromatic wires, etc. It is fitted with transparent coloured sheets and with an english teaching guide. Size: 46x62 cm.

HS2668 Meiosis

Protruding model illustrating the meiotic cell division.

Students can study the trasmission of parents' specific features and observe the enlargement of chromosomes, cytoplasm and chromatic and polar bodies. It is fitted with transparent coloured sheets and english teaching guide. Size: 46x62 cm.



ANATOMICAL MODELS

GD0101 Human skeleton, 170 cm

Human skeleton made of unbreakable plastic, standard model. Natural modelling of an high quality male skeleton. All the apertures, the openings and the anatomic details are carefully reproduced. The skull can be decomposed into three parts: cranial vault, cranial base and jaw. Skull, arms and legs are jointed. Model mounted on a movable tripod with small wheels. Height:170 cm.

GD0111 Human mini-skeleton, 85 cm

Human mini-skeleton made of unbreakable plastic, standard model. Natural modelling of an high quality male skeleton. All the apertures, the openings and the anatomic details are carefully reproduced.

Model mounted on a fixed steel tripod. Height: 85 cm.

GD0102 Human skull

Life-size modelling of an high quality human skull. All the anatomic details, apertures and openings are carefully reproduced. Thanks to a specific manufacturing process, the denture is reproduced with great care as regards the position of teeth and the interdental system. The skull is decomposable in three parts: calotte, cranial base and jaw.

GD0141 Vertebral column

Flexible, with pelvis, occipital bone, nerve endings, vertebral artery and herniated disc spine lateral between the third and the fourth lumbar vertebra..

GD0206 Mini-torso with removable head

Approximately the life size. The mini-torso is a small model that corresponds to the bigger anatomic models as regards the implementation and the details. It is decomposable into 11 parts and it is mounted on a plastic stage. Height: 45 cm.

GD0202 Human torso masculine - feminine

Human torso, life size, decomposable into 38 parts. All the details, the colours and the openings are made of high quality plastic and are carefully reproduced. The model includes the masculine and feminine genital organs. Height: 85 cm.

GD0203 High Quality Model of sexless human body, with open back

Natural-size human body, which can be dismantled into 17 parts. This model is characterized by the very high quality of the details and the superior colour reproduction. In addition, the type of plastics used contributes further to make this model particularly realistic. Height: 85 cm.

GD0501 Muscular system

Model of the human masculine muscular system. Removable pectoral muscles. It is possible to remove the internal organs. Model mounted on a rectangular stage. Height: 85 cm.

GD0304

GD0202

GD0304 Brain

Human brain model, decomposable into 8 parts.

GD0501

The arteries are carefully reproduced and the model is mounted on a plastic stage. Natural size.



GD0111

GD0101





HUMAN ANATOMY

GD0307	GD0314	GD0307	Eye Enlarged 5 times, decomposable into 6 parts: sclera with cornea and muscle listings, vascular tunic with retina and iris, vitreous humor and crystalline lens. Mounted on rectangular plastic stage. Size: 13x14x21 cm.
	THE	GD0309	Ear Enlarged approximately 3 times, decomposable into 4 parts. The external auditory meatus, the middle and inner ear, the eardrum with the hammer and the removable incus are visible. Mounted on a rectangular plastic stage. Size: 34x16x19 cm.
GD0309		GD0314	Larynx Model enlarged approximately 2 times and a half. Epiglottis, vocal cords, movable arytenoid cartilage, not decomposable. Mounted on a rectangular plastic stage. Size: 14x14x28 cm.
	Self.	GD0311	Teeth set These anatomic models of 3 different human teeth show the morphological differences between the bucktooth, the canine tooth and the premolar tooth. The dissection of the canine and premolar teeth shows their internal structure. Models enlarged approximately 12 times.
4 (mar)		GD0313	Jaw Enlarged model of young man's half jaw, decomposable into two parts. The teeth, their roots, the nerve endings, the boold vessels and the gum are stressed. Two teeth are removable and decomposable. Model enlarged approximately 3 times.
GD0313	D15	D15	Decayed tooth Upper molar with three roots, enlarged approximately 15 times, decomposable into to 6 parts: longitudinal section of the crown and two roots, the pulp and three interchangeable components showing the progressive stages of decays formation. Mounted on support. Size: 18x18x24 cm.
		GD0312	Model for dental hygiene Enlarged approximately 6 times, the model shows the denture and the palate of an adult and it is suitable to demonstrate the dental hygiene. It is fitted with a big size toothbrush. Size: 18x23x12 cm
		GD0322	Heart Model of human heart, natural-size, decomposable into two parts. Vision of the atriums, of the ventricles and of the cardiac valves. Mounted on a rectangular plastic stage.
GD0312	GD0322	GD0321	Heart Model of human heart enlarged approximately 6 times, decomposable into 6 parts. Thanks to the openings of the front part, it is possible to see the ventricles and the under valvular apparatus. The right auricular appendix which includes the roots of the big vessels and the pulmonary valve, is removable so that the atrium right of the heart become visible. The left atrium of the heart become visible detaching another part. The appric valve is removable. Mounted on a plastic rectangular stage
		GD0331	Skin section Table model, enlarged approximately 40 times. On every half you can see the 3 layers of the scalp and of the skin without hair, with hair roots, sweat glands, etc. Size: 24x3,5x15 cm.
GD0321		GD031:	L GD0331
5		0	

G300 Circulatory system

Protruding model, approximately half of the life-size. Schematic representation of the human body's vascular system. Size: 45x20x3 cm.

GD0319 Lungs

This model shows the segments of the right lung and left lung, the bronchial tube and the windpipe. The lungs are shown in blacklight. Mounted on a plastic stage, Natural-size

GD0320 Pulmonary alveolus

This model shows the distribution of the terminal bronchioles in the lung ad its relation with the pulmonary alveolus. Mounted on plastic stage. Size: 20x15x14 cm.

GD0326 Stomach

Model of enlarged stomach, decomposable into two parts. The internal and external walls of the stomach are represented, with a part of the oesophagus and duodenum. Mounted on a rectangular plastic stage. Size: 19x12x25 cm.

K20 Digestive system

Natural-size. The model shows the digestive tract from the oral cavity to the rectum. The tract head-oesophagus-stomach-intestine (detachable transverse colon) and the bottom part of the liver with the gall bladder are represented.

GD0324 Liver

Model of liver, natural-size, not decomposable. The four liver lobes, the gall bladder and the vessels are represented. Mounted on a rectangular plastic stage. Size: 18x12x18 cm.

GD0325 Pancreas

Model of pancreas, natural-size, not decomposable. It can be mounted on the stand of the liver model code GD0324 together with it, as shown in the picture.

GD0327 Kidney

Enlarged model of kidney, section. Mounted on a rectangular plastic base.

GD0328 Male urogenital system

This model shows the external features and the structure of the male urogenital system, including kidneys, the urinary bladder, the penis and the testicles; mounted on a circular plastic stage. Size: 20x20x50 cm.

GD0329 Female Urogenital System

Feminine version of the model GD0328.

GD1501 Simulator of vertebral discopathies

This innovative model illustrates the damaged mechanism of a spinal disc herniation. The simulator demonstrates how the intervertebral disc prolapses when flexing the vertebrae, reproducing what actually happens when bending or twisting the trunk. Given the diffusion of vertebral damages, therapists may find this model very useful to teach patients the proper spinal column's behaviours and motions.

This model is of great help in medicine, physiotherapy, surgeries, prevention of risks in working places, ergonomics, physical education and other fields.

The model is composed of two vertebrae with an elastic intervertebral disc, spinal cord and spinal nerves.

Size: 12x11, 5x9 cm, weight: 0.6 kg









GD0324

GD0325







HUMAN ANATOMY

GD0319

HUMAN ANATOMY AND MODEL OF DNA

	TA2002	TA2003	TA2005
		400	J.S
MKS122/2			
7300		W19205	
		A	



WALL TABLES

TA2001 Human skeleton: Front view, 84x200 cm. **TA2002** Human skeleton: Rear view, 84x200 cm. Human musculature: Front view, 84x200 cm. TA2003 TA2005 Human musculature: Rear view, 84x200 cm. TA2004 Circulatory system: 84x200 cm. Nervous system: Front view, 84x200 cm. TA2037 TA2038 Nervous system: Rear view, 84x200 cm. Torso: 84x118 cm. **TA2008** TA2036 Breathing organs: 84x118 cm. TA2043 Digestive system: 84x118 cm. Flow of blood: 84x118 cm. TA2018 Human cell structure: 84x118 cm. TA2027 Blood: composition: 84x118 cm. TA2031 TA2049 Cell division: mitosis: 84x118 cm. Cell division: meiosis: 84x118 cm. TA2051 Male genital organs: 84x118 cm. TA2020 Female genital organs: 84x118 cm. TA2021 W19204 Kit for models of nucleic acids It consists of colored units (phosphoric group, purine and pyrimidine) that enable the creation of DNA molecules and of various types of RNA. It can also be used to explain the self-duplication and reproduction. MKS-122/2 Kit for DNA model This kit for educational activities includes carbon, nitrogen, oxygen and hydrogen atoms of different colours, with different holes, and the respective connections to create the molecular structures of the nucleotides which compose theDNA helix. It is fitted with a pedestal which support the different models. It is fitted with an instructions guide for assembly. Height: 12 cm. 7300 DNA Double Helix Model (cheap model) Simple but complete DNA model, dismountable. Ideal for students. Height: 60 cm. W19205 **DNA Double Helix Model** It consists of three DNA double helix made of nucleic acids to demonstrate the possible pairing between nitrogen bases. On the top there is a RNA filament to show the principles of DNA transcription. It is fitted with stage. Height: 31 cm. 7237 How to use DNA in police investigations One of the methods used by the police to solve a murder is to examine the DNA of the

fingerprint found on the criminal scene.

The students study the bases of DNA through the fingerprints and learn the extraction and the structure of DNA. Fitted with teaching guide.



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