

Grade 5 Science

Question Bank with Answers

Egyptian Curriculum

First Term • 2027 Editions

707 questions and model answers

Organized by the Ministry textbook's chapters and lessons. Questions from the supplied textbook, external books, assessments and exams are grouped by topic, with repeated wording consolidated.

How to practice

- Cover the answer, attempt the question, then check your response.
- For multiple-choice questions, choose one answer unless the instruction says to choose all correct answers.
- For false statements, learn the corrected statement as well as the answer.
- For drawings and experiments, use the model answer to check labels, observations and fair-test conditions.

Question formats

Completion • Multiple choice • Choose all • True or False • Correction • Scientific terms • Definitions • Reasons • Predictions • Comparisons • Functions • Examples • Matching • Classification • Odd one out • Ordering • Tables • Calculations • Experiments • Diagrams • Observation • Drawing • Thinking questions

المرحلة الابتدائية

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شرح وتدريبات

المرحلة الابتدائية

Chapter 1

Bones and Muscles

Source guide: Ministry textbook pp. 6–19; Al Moasser main book PDF pp. 4–31; related assessment, supplement and exam questions.



Lesson 1.1 Bones and Muscles

Complete the sentences

- Q1.** The human body moves because muscles _____ and _____.
- Q2.** Muscles move bones by _____ them.
- Q3.** When the arm stretches, the _____ muscle contracts and the _____ muscle relaxes.
- Q4.** When the arm bends, the _____ muscle contracts and the _____ muscle relaxes.
- Q5.** Muscles usually work in _____ to move bones.

Choose the correct answer

- Q6.** A person can walk because leg muscles:
- A) relax only
 - B) contract only
 - C) contract and relax
 - D) are replaced by bones.
- Q7.** When an arm bends, its outer upper-arm muscle becomes:
- A) hard and short
 - B) soft and long
 - C) hard and long
 - D) soft and short.
- Q8.** When the inner upper-arm muscle contracts, it becomes:
- A) harder and shorter
 - B) softer and longer
 - C) harder and longer
 - D) softer and shorter.
- Q9.** Which action moves a bone?
- A) A muscle pushes it
 - B) A muscle contracts and pulls it
 - C) The bone contracts
 - D) The skin expands.

True or False with correction

- Q10.** Muscles are soft body parts beneath the skin and cover many parts of the body.
- Q11.** Bones contract and relax to produce movement.
- Q12.** When the arm stretches, the outer muscle becomes harder than the relaxed inner muscle.

Q13. When a person holds a heavy box with bent arms, the inner upper-arm muscles contract.

Correct the statements

Q14. Correct the wrong words: Muscles are hard and strong structures.

Q15. Correct the wrong word: When the inner upper-arm muscle contracts, the arm stretches.

Q16. Correct the wrong words: A contracting muscle becomes longer and softer.

Write the scientific term

Q17. Soft body parts that contract and pull bones to move the body.

Q18. The process in which a muscle becomes shorter, thicker and harder.

Q19. The process in which a muscle becomes longer and softer and returns towards its resting state.

Q20. The inner upper-arm muscle that contracts when the arm bends.

Give reasons

Q21. Why do muscles usually work in pairs?

Q22. Why does the outer upper-arm muscle become shorter and harder when the arm stretches?

Q23. Why does the inner upper-arm muscle contract when lifting a load with a bent arm?

What happens

Q24. What happens if the muscles attached to bones can no longer contract?

Q25. What happens to the arm when its inner muscle contracts while its outer muscle relaxes?

Q26. What happens if both opposing upper-arm muscles contract strongly at the same time?

Compare

Q27. Compare a muscle during contraction and relaxation in length and hardness.

Q28. Compare the roles of bones and muscles in movement.

Observe and apply

Q29. Name the main muscle groups used when walking, climbing stairs, writing and lifting a glass to drink.

Q30. Bend your elbow and feel the front and back of your upper arm. Which side feels harder, and why?

Q31. Stretch the same arm. How does the hardness of the inner and outer muscles change?

Lesson 1.2 Structure of Bones

Complete the sentences

Q32. The place where two or more bones meet is a _____.

Q33. _____ acts as a cushion between the ends of bones at a joint.

Q34. The shoulder, elbow and wrist are joints of the _____ limbs.

Q35. The hip, knee and ankle are joints of the _____ limbs.

Q36. The fingers of one hand contain _____ joints; the fingers of both hands contain _____.

Choose the correct answer

Q37. Which is NOT a function of bones?

- A) Supporting the body
- B) Protecting organs
- C) Contracting and relaxing
- D) Helping movement with muscles.

Q38. Which is a joint of the upper limb?

- A) Hip
- B) Knee
- C) Ankle
- D) Elbow.

Q39. Which joint allows movement in several directions?

- A) Shoulder
- B) Elbow
- C) Knee
- D) Finger joint.

Q40. Which joint is found in the lower part of the body?

- A) Wrist
- B) Shoulder
- C) Hip
- D) Elbow.

Choose all correct answers

Q41. Select joints that mainly bend and straighten in the school classification:

- A) Knee

- B) Hip
- C) Elbow
- D) Ankle.

Q42. Select joints in the upper limbs:

- A) Elbow
- B) Wrist
- C) Knee
- D) Shoulder.

True or False with correction

Q43. All joints can rotate freely in every direction.

Q44. Cartilage helps prevent bones from rubbing directly against each other.

Q45. The knee joint helps us stand, sit, walk and run.

Q46. The wrist joint is found in the lower part of the body.

Correct the statements

Q47. Correct the wrong word: Muscles form a smooth cushion at the ends of bones.

Q48. Correct the wrong statement: A joint is a cushion that restricts movement and prevents wear.

Write the scientific term

Q49. Hard, strong structures that form the body skeleton.

Q50. A flexible cushion at the ends of bones that reduces friction and wear.

Give reasons

Q51. Why are joints important for everyday movement?

Q52. Why is cartilage important in joints?

What happens

Q53. What would happen if the human skeleton had no movable joints?

Q54. What happens if cartilage between the knee bones wears away completely?

Q55. What would happen if the human body had no bones?

Compare

Q56. Compare shoulder and elbow joints in their range of movement.

Give examples

Q57. Give one example of a joint that bends the arm, a joint that moves the hand, and a joint that moves the foot.

Classification

Q58. Classify shoulder, elbow, wrist, hip, knee, ankle and finger joints into several-direction joints and mainly bending-and-straightening joints.

Q59. Classify shoulder, elbow, knee and skull joints as freely movable, limited in direction, or fixed.

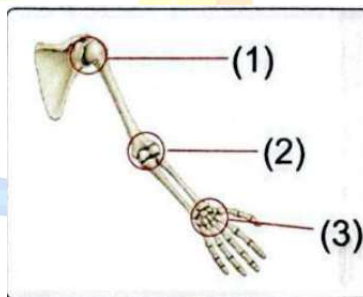
Odd one out

Q60. Knee joint - Elbow joint - Ankle joint - Shoulder joint. Give the reason.

Q61. Shoulder joint - Hip joint - Wrist joint - Ankle joint. Give the reason.

Label and interpret the diagram

Q62. Identify joints 1, 2 and 3. Which allow movement in several directions, and which mainly bends and straightens?



Observe and apply

Q63. Which small joints help you hold a pen? Which connections allow your back to bend?

Lesson 1.3 Whole Body Skeleton

Complete the sentences

Q64. The adult human skeleton consists of about _____ connected bones.

Q65. The _____ protects the brain, while the _____ protect the heart and lungs.

Q66. The backbone consists of many _____ bones arranged _____.

Choose the correct answer

Q67. The ribs are:

- A) thin bones on both sides of the chest
- B) large bones in the back
- C) muscles in the chest

D) one straight bone.

Q68. Which part allows the body to bend forwards, backwards and sideways?

- A) Skull
- B) Heart
- C) Backbone
- D) Ribs alone.

Choose all correct answers

Q69. Which organs does the skeleton help protect?

- A) Brain
- B) Heart
- C) Lungs
- D) Hair.

True or False with correction

Q70. The skeleton is made of connected muscles.

Q71. The skull protects the brain like a helmet.

Q72. The backbone is one long, unbendable bone.

Correct the statements

Q73. Correct the wrong word: The backbone protects the brain.

Q74. Correct the wrong words: The ribs are located in the abdominal region.

Write the scientific term

Q75. The framework of connected bones that gives the whole body its shape.

Q76. The part of the skeleton that acts as the main supporting pillar of the body.

Give reasons

Q77. Why is the skull made of strong bones?

Q78. Why do ribs form a cage around the chest?

Q79. Why does the backbone consist of many small connected bones instead of one long bone?

What happens

Q80. What would happen if the skull were very soft and flexible?

Q81. What would happen if the backbone were a single rigid bone?

Compare

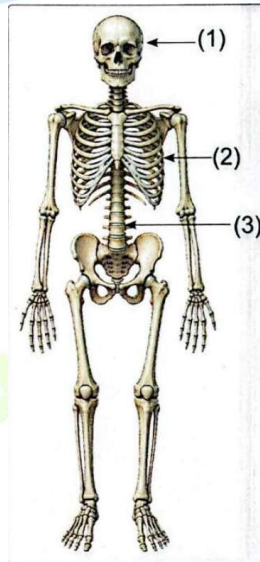
Q82. Compare the ribs and backbone in location, structure and function.

Functions and importance

Q83. State three main functions of the skeleton.

Label and interpret the diagram

Q84. Identify the structure shown and name parts 1, 2 and 3. Which numbered part allows the back to bend?



Observe and apply

Q85. Touch your chest while taking a deep breath. Which bones can you feel, and what change occurs?

Draw and label

Q86. Draw the main parts of a human skeleton and label the skull, ribs and backbone. State the function of each label.

Lesson 1.4 Animal Bodies

Complete the sentences

Q87. Humans, dogs and rabbits move using _____, _____ and _____.

Q88. Animals differ in the _____ and _____ of their bones and in muscle _____.

Q89. A dog's forelimb corresponds to a human's _____ limb.

Choose the correct answer

Q90. A rabbit can jump quickly because it has:

- A) long, strong hind limbs
- B) no joints
- C) short forelimbs only

D) a rigid backbone.

Q91. Differences in animal bone shape and length mainly depend on:

- A) body colour
- B) their way of life and movement
- C) the weather on one day
- D) their names.

Choose all correct answers

Q92. Cats and dogs both have:

- A) bones
- B) feathers
- C) joints
- D) muscles.

True or False with correction

Q93. A dog's front legs have joints that work in a similar way to human arm joints.

Q94. Rabbits move because their bones contract and pull their muscles.

Q95. Having similar skeletal parts means all animals can perform exactly the same movements.

Correct the statements

Q96. Correct the wrong word: The human elbow corresponds to the elbow in a dog's hind limb.

Give reasons

Q97. Why do cats have flexible muscles and joints?

Q98. Why do dogs and humans share the same basic mechanism of movement?

Q99. Why are a camel's toe bones able to spread out on the sand?

Q100. How does concentrating fat in a hump help a camel in hot conditions?

What happens

Q101. What would happen if a rabbit had very short hind limbs?

Q102. Could a dog's skeleton move if it had no attached muscles? Explain.

Compare

Q103. Compare a dog's forelimb joints and a rabbit's hind-limb joints.

Q104. Compare the limb adaptations of dogs, rabbits and cats.

Functions and importance

Q105. What is stored in a camel's hump, and how does it help during a long journey?

Q106. How do a camel's calluses protect it when sitting?

Thinking and application

Q107. Different bone shapes can indicate different functions. Support this statement with two examples.



Chapter 2

Changes in the Seasons

Source guide: Ministry textbook pp. 20–27; Al Moasser main book PDF pp. 32–49; related assessment, supplement and exam questions.



Lesson 2.1 Changes over a Year

Complete the sentences

Q108. Luffa completes its _____ in one year.

Q109. Luffa seeds are planted in suitable _____ weather.

Q110. During growth, luffa has climbing _____ and wide _____.

Q111. As luffa fruits dry, their colour changes from _____ to _____.

Q112. The dry luffa fruit contains _____ seeds that can start the next generation.

Choose the correct answer

Q113. Which part starts a new luffa life cycle?

- A) A dried leaf
- B) A seed
- C) A dead root
- D) A petal.

Q114. Where are new luffa seeds found?

- A) Inside the fruit
- B) On the roots
- C) Inside leaves
- D) On the stem surface.

Q115. Which part of the luffa plant climbs?

- A) Roots
- B) Stems
- C) Fruits
- D) Seeds.

Q116. When do luffa flowers usually appear?

- A) In warm growing weather
- B) In extreme cold
- C) Only after the plant dies
- D) Before seeds sprout.

Choose all correct answers

Q117. Which changes occur during the warm growing season?

- A) Stems grow taller
- B) Flowers bloom
- C) All leaves immediately dry
- D) Fruits develop.

Q118. Which statements about luffa seeds are correct?

- A) They are dark

- B) They need extreme cold to sprout
- C) They can grow into a new luffa plant
- D) They form inside fruits.

True or False with correction

Q119. Many plants change their appearance with seasonal temperature changes.

Q120. A luffa plant's climbing roots extend above the ground during growth.

Q121. New fruits appear before flowers in the usual luffa life cycle.

Q122. A tomato plant's leaves normally dry because it is growing well in warm weather.

Correct the statements

Q123. Correct the wrong word: Seasonal changes in a plant over one year form its daily cycle.

Q124. Correct the statement: A luffa plant dies in winter and leaves no sign of life for the next year.

Q125. Correct the wrong word: Flowers are planted to start the next luffa generation.

Write the scientific term

Q126. The stages of a plant's life completed within one year as seasons change.

Q127. The dark structures inside dry luffa fruits that can grow into new plants.

Q128. The yellow luffa part that appears after leaf growth and is involved in producing fruit.

Give reasons

Q129. Why do some plants wither as winter becomes cold?

Q130. Why does a luffa fruit turn brown at the end of its growing season?

Q131. Why does the withering of a luffa plant not end its life cycle permanently?

Q132. Why are flowers important in a plant's life cycle?

Q133. Why do many plants grow rapidly in spring and summer?

What happens

Q134. What happens if luffa seeds are planted during very cold winter weather?

Q135. What happens if a luffa seed has warmth and air but no water?

Q136. What changes may occur in a tomato plant when seasonal temperatures become too low?

Q137. What would happen to luffa seed production if the plant formed no flowers?

Q138. What could happen if every luffa fruit were removed and no seeds were saved or left to grow?

Compare

Q139. Compare the luffa plant in summer and winter.

Q140. Compare the yearly cycles of luffa and tomato plants.

Matching

Q141. Match each item to its description. Items: 1) Green luffa fruit 2) Brown luffa fruit 3) Dark luffa seed. Descriptions: A) Begins a new cycle B) Forms during growth C) Mature dried fruit.

Arrange in order

Q142. Arrange: fruit dries and new seeds remain; seed germinates; seeds are planted; climbing stems and leaves grow; flowers bloom and fruits develop.

Observe and apply

Q143. Describe the luffa fruit from early development to the stage when fibres can be collected.

Lesson 2.2 Animals and Temperature

Complete the sentences

Q144. When temperatures fall, lizards become ____; when temperatures rise suitably, they become more ____.

Q145. Some animals stay in soil or rock crevices during winter in a state called ____.

Q146. Birds that move to warmer places are showing ____.

Q147. Migrating birds seek suitable temperatures and available ____ and ____.

Q148. Flamingos and some ducks visit Egypt during ____.

Q149. Feathers, fur and layers of ____ help animals retain body heat.

Choose the correct answer

Q150. Which animal may hibernate?

A) Frog

- B) Flamingo
- C) Eagle
- D) Duck.

Q151. Where might a lizard be found basking on a warm day?

- A) On a sunny rock
- B) Flying overhead
- C) Inside a frozen pond
- D) Always deep in soil.

Q152. The main seasonal factor affecting lizard activity is:

- A) temperature
- B) flower colour
- C) cloud names
- D) bone number.

Choose all correct answers

Q153. Which birds are given as examples of winter visitors to Egypt?

- A) Ducks
- B) Snakes
- C) Flamingos
- D) Frogs.

True or False with correction

Q154. Lizards are equally active in summer and very cold winter weather.

Q155. Hibernation helps conserve energy during cold weather.

Q156. A motionless lizard in cold weather must be sleeping normally.

Correct the statements

Q157. Correct the wrong term: Hibernation is the movement of birds to warmer regions.

Q158. Correct the wrong term: Migration is winter inactivity in soil or rock crevices.

Q159. Correct the wrong animal: Lizards have feathers to help them stay warm.

Write the scientific term

Q160. The behaviour in which some animals remain inactive in sheltered places during winter to conserve energy.

Q161. Seasonal movement of animals from one region to another, often to find warmer conditions and food.

Give reasons

Q162. Why do lizards bask in sunlight on warm rocks?

Q163. Why can humans remain active in cold weather while lizards become slow?

Q164. Why do some ducks and flamingos migrate to Egypt in winter?

Q165. Why do birds have feathers and foxes have fur?

What happens

Q166. What might migratory birds do if their usual winter destination in Egypt became extremely cold?

Q167. What happens if lizards lose sheltered rock crevices during cold winter weather?

Q168. What happens if shade and rock crevices disappear in an extremely hot desert summer?

Q169. How might a sudden suitable rise in winter temperature affect a lizard?

Q170. What could happen if a bird lost its insulating feathers during cold weather?

Compare

Q171. Compare birds and lizards in their responses to cold weather.

Q172. Compare the winter survival of luffa, lizards and migratory birds.

Q173. Compare white and black cloth in the way they interact with sunlight.

Functions and importance

Q174. How do a fennec fox's large ears help it in the desert?

Q175. How does hair on the soles of a fennec fox's paws help it?

Q176. State one important role of the Sun for plants and one for lizards.

Matching

Q177. Match: 1) Eagle 2) Fox 3) Seal. Coverings: A) Fur B) Fat under the skin C) Feathers.

Classification

Q178. Classify bird migration and wearing warm socks as a natural adaptation or a human invention.

Odd one out

Q179. Lizard - Flamingo - Snake. Explain.

Q180. Duck - Flamingo - Snake. Explain.

Thinking and application

Q181. How can a loose galabeya help cool the body?

Q182. If temperatures did not change through the year, how might seasonal plant and animal behaviour differ?



Chapter 3

Conditions for Germination

Source guide: Ministry textbook pp. 28–43; Al Moasser main book PDF pp. 50–82; related assessment, supplement and exam questions.



Lesson 3.1 Inside the Seed

Complete the sentences

- Q183.** The small plant-like part inside a seed is the _____.
Q184. A kidney bean seed has two _____ that store food.
Q185. The nutrient tested in the bean's cotyledons is _____.
Q186. _____ solution turns _____ in the presence of starch.
Q187. The embryo and cotyledons are protected by the _____.
Q188. A _____ helps us observe the small structures inside a split seed.

Choose the correct answer

- Q189.** Which seed part grows into a new plant?
A) Embryo
B) Seed coat
C) Stored starch
D) Cotton.
- Q190.** Which part makes up most of a kidney bean seed?
A) Leaves
B) Cotyledons
C) Root
D) Stem.
- Q191.** The main function of cotyledons in the early bean seed is to:
A) store food
B) collect pollen
C) make flowers
D) form a fruit.
- Q192.** What colour change indicates starch?
A) Brown to blue-black
B) Blue to red
C) Green to yellow
D) Brown to clear.

Choose all correct answers

- Q193.** Select correct statements about a kidney bean seed:
A) Its embryo develops into a plant
B) Its cotyledons store starch
C) Its seed coat protects it
D) It has no stored food.

True or False with correction

Q194. The embryo is a miniature structure that can develop roots, a stem and leaves.

Q195. A germinated bean seed usually has more stored starch than an ungerminated one.

Q196. All plant seeds have exactly the same shape and colour.

Q197. Iodine always becomes blue-black even when starch is absent.

Correct the statements

Q198. Correct the wrong term: The cotyledon is the tiny plant-like part inside the seed.

Q199. Correct the wrong liquid: Soak a seed in oil to soften its coat before opening it.

Q200. Correct the statement: A bean embryo feeds on starch in only one cotyledon.

Write the scientific term

Q201. The tough outer covering of a seed.

Q202. The stored nutrient that gives a blue-black colour with iodine.

Q203. The chemical solution used to test for starch.

Definitions

Q204. What is meant by germination?

Give reasons

Q205. Why are cotyledons important before green leaves develop?

Q206. Why is a bean seed soaked in water before dissection?

Q207. Why may a cotyledon from a seed that has grown for several days show only a faint blue-black colour with iodine?

What happens

Q208. What happens if the embryo inside a kidney bean seed dies?

Q209. What happens if the cotyledons are removed before a bean seed germinates?

Q210. What happens when iodine is placed on an ungerminated bean cotyledon?

Q211. What would an iodine test show on a properly prepared leaf containing starch?

Compare

Q212. Compare the embryo and cotyledons in appearance and function.

Q213. Compare the iodine test before and after several days of bean germination.

Classification

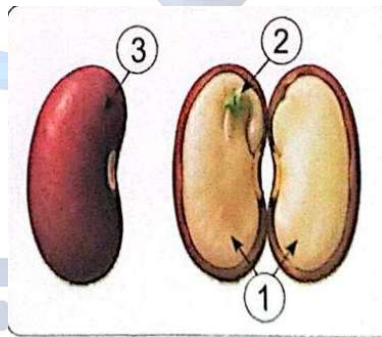
Q214. Classify starch and suitable temperature as stored food or an external condition for germination.

Experiments and fair tests

Q215. Describe how to examine a kidney bean seed and test it for starch.

Label and interpret the diagram

Q216. Name parts 1, 2 and 3 of the bean seed. Which nutrient can be detected in part 1 using iodine?



Observe and apply

Q217. Describe the typical seed examples shown in the book: wheat, sunflower, chickpea, cotton, date palm and corn.

Draw and label

Q218. Draw an opened kidney bean seed and label the embryo, two cotyledons and seed coat.

Thinking and application

Q219. A seed sample does not turn blue-black with iodine. What can you conclude?

Lesson 3.2 Water and Germination

Complete the sentences

Q220. To test one condition fairly, change _____ condition and keep the others _____.

Q221. In the water experiment, the changed condition is the presence or absence of _____.

Q222. The seeds are placed on _____, which holds moisture.

Choose the correct answer

Q223. Which must differ between the two cups when testing the need for water?

- A) Water supply
- B) Seed type
- C) Temperature
- D) Light.

Q224. What happens if two conditions are changed together?

- A) The cause becomes clearer
- B) The cause of the result cannot be isolated
- C) All seeds must sprout
- D) The experiment needs no observations.

Choose all correct answers

Q225. When testing water, keep these the same:

- A) temperature
- B) access to air
- C) brightness
- D) presence of water.

True or False with correction

Q226. Seeds on dry cotton will germinate just because the place is warm.

Q227. Seeds can germinate on moist cotton without agricultural soil if the other conditions are suitable.

Write the scientific term

Q228. Testing one condition while keeping all other conditions the same.

Q229. The factor deliberately altered to test its effect in an experiment.

Give reasons

Q230. Why must temperature, air and light be kept the same in the water experiment?

Q231. Why should the cotton be moist without completely covering the seeds in water?

What happens

Q232. Predict the result after several days for identical seeds on moist cotton and dry cotton in the same warm place.

Q233. How does drought affect seed germination and young plants?

Experiments and fair tests

Q234. Plan a fair test to show whether water is needed for germination.

Thinking and application

Q235. Cup A contains wet cotton in a warm room; cup B contains dry cotton in a cold room. Is this a fair test of water? Explain.

Q236. What should be recorded each day in a germination experiment?

Lesson 3.3 Air and Germination

Complete the sentences

Q237. Seeds need _____ for respiration during germination.

Q238. When testing air, keep water, _____ and _____ the same.

Choose the correct answer

Q239. How does the school experiment restrict a seed's access to air?

- A) Completely submerge it in water
- B) Put it on moist cotton
- C) Warm the room
- D) Open the cup.

Q240. Seeds completely submerged in the experiment fail to germinate mainly because they lack enough:

- A) air
- B) seed coats
- C) stored food
- D) sunlight.

True or False with correction

Q241. Changing the seed type is the main condition when testing the need for air.

Correct the statements

Q242. Correct the statement: Temperature should differ between the two cups when testing air.

Give reasons

Q243. Why may overwatering prevent bean seeds from germinating?

What happens

Q244. Can a seed germinate with water and suitable warmth but no air, for example in an airless space experiment?

Compare

Q245. Compare seeds on moist cotton exposed to air with seeds kept fully submerged, with other conditions the same.

Experiments and fair tests

Q246. Plan a test of whether air is necessary for bean germination.

Lesson 3.4 Temperature and Germination

Complete the sentences

Q247. Seeds in a refrigerator do not germinate in the school experiment because the _____ is too low.

Q248. The warm-room cup is covered with a cardboard box to keep _____ conditions like those in the refrigerator.

Q249. Wooden blocks under the box leave a gap for _____ to enter.

Choose the correct answer

Q250. Which condition changes when one seed cup is in a warm room and another is in a refrigerator?

- A) Temperature
- B) Seed type
- C) Water supply
- D) Cotton type.

Q251. Why cover the warm-room cup?

- A) To equalise light conditions

- B) To remove all air
- C) To add fertilizer
- D) To change the seed type.

Choose all correct answers

Q252. Keep these the same in the temperature experiment:

- A) water
- B) air
- C) light
- D) temperature.

True or False with correction

Q253. Bean seeds germinate faster at refrigerator temperature than at suitable warmth.

Give reasons

Q254. Why is a gap left under the cardboard box?

Q255. Why do both cups receive equal suitable amounts of water in the temperature experiment?

What happens

Q256. What happens to bean seeds on moist cotton in a warm dark box with an air gap?

Q257. What happens if a box used in the temperature experiment is sealed so no fresh air can enter?

Experiments and fair tests

Q258. Explain how to test whether bean seeds need warmth.

Lesson 3.5 Summary of Germination

Complete the sentences

Q259. The three conditions needed for bean seed germination are _____, _____ and _____.

Q260. Sunlight and added _____ are not needed for bean germination itself, but support later healthy growth.

Choose the correct answer

Q261. Which statement is correct?

- A) Water alone is sufficient
- B) All three basic conditions must be suitable
- C) Seeds need no air
- D) Extreme cold is essential.

True or False with correction

Q262. Fertile soil is an essential requirement for a bean seed to begin germinating.

Correct the statements

Q263. Correct the statement: Light is the main food supply for a bean embryo during germination.

Give reasons

Q264. Why can a bean seed germinate without sunlight or fertilizer?

What happens

Q265. What happens if any one essential germination condition is missing?

Compare

Q266. Compare the changed condition and the conditions kept the same in the water, air and temperature germination experiments.

Matching

Q267. Match the test to the changed condition: 1) Water test 2) Air test 3) Temperature test. A) Warm or cold B) Wet or dry C) Air available or restricted.

Classification

Q268. Classify water, air, suitable warmth, sunlight and added fertilizer into essential conditions for bean germination and additional factors for later growth.

Complete the table

Q269. Predict germination: A) water + air + warmth B) no water + air + warmth C) water + no air + warmth D) water + air + refrigerator temperature E) water + air + warmth + darkness.

Case	Conditions	Will the seeds germinate?
A	Water, air and warmth	
B	No water; air and warmth	

C	Water and warmth; no air	
D	Water and air; refrigerator temperature	
E	Water, air and warmth; darkness	

Observe and apply

Q270. Would wheat, corn and chickpea seeds necessarily look the same? What basic conditions would you investigate for each?

Thinking and application

Q271. Write a short diary entry from the viewpoint of a bean embryo waiting to germinate.

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Chapter 4

Conditions for Growth

Source guide: Ministry textbook pp. 44–51; Al Moasser main book PDF pp. 83–101; related assessment, supplement and exam questions.



Lesson 4.1 Sunlight and Growth

Complete the sentences

Q272. After germination, plants need _____ to make their own food.

Q273. A healthy seedling receiving suitable sunlight has _____ leaves and a _____ stem.

Q274. A seedling kept in darkness may develop _____ leaves and a _____ stem.

Q275. When testing sunlight, use seedlings of the same _____ and approximately the same _____.

Choose the correct answer

Q276. Which is changed in the sunlight experiment?

- A) Light supply
- B) Water supply
- C) Plant type
- D) Temperature.

Q277. Which structure supports the plant and helps it withstand wind?

- A) Stem
- B) Pollen
- C) Seed coat
- D) Petal.

Choose all correct answers

Q278. Keep these the same when testing sunlight:

- A) plant type
- B) water
- C) temperature
- D) light exposure.

True or False with correction

Q279. Water alone allows a green plant to remain healthy indefinitely in complete darkness.

Q280. A dark cardboard box increases the sunlight reaching a plant.

Q281. A plant can be affected by dry soil even when it receives sunlight.

Correct the statements

Q282. Correct the wrong words: A dark-grown seedling usually has thick, strong stems and dark green leaves.

Q283. Correct the statement: Use different-sized plants of different kinds to test sunlight fairly.

Write the scientific term

Q284. A young plant that has recently developed from a germinating seed.

Q285. The energy source green plants use to make food.

Give reasons

Q286. Why is sunlight necessary for healthy growth after germination?

Q287. Why must both plants receive equal water in the sunlight experiment?

What happens

Q288. Predict the appearance of a bean seedling after about a week under a light-blocking box.

Compare

Q289. Compare two similar seedlings grown with sunlight and without sunlight.

Experiments and fair tests

Q290. Plan a fair test of the effect of sunlight on seedling growth.

Label and interpret the diagram

Q291. Plant A is in light and plant B is under a dark box. Predict their leaf colour and strength after several days. Why must both receive equal water?

**Thinking and application**

Q292. A dark-grown seedling becomes taller but weaker. Does greater height alone prove healthier growth?

Lesson 4.2 Fertilizer and Growth**Complete the sentences**

Q293. Fertilizer contains _____ that support plant growth.

Q294. Plant height can be measured using a _____ or a _____.

Q295. When fertilizer is tested, the presence or absence of _____ is changed.

Q296. With suitable nutrients, leaves may become _____ and increase in _____, while stems become longer and stronger.

Choose the correct answer

Q297. Which is NOT an expected benefit of suitable fertilizer?

- A) Bigger plant
- B) Stronger stem
- C) More leaves
- D) Fewer leaves caused by poor growth.

Q298. To test fertilizer fairly, give both plants:

- A) equal water
- B) different light
- C) different temperatures
- D) different soil types.

Choose all correct answers

Q299. Keep these the same in a fertilizer experiment:

- A) sunlight
- B) water
- C) plant type and starting size
- D) fertilizer treatment.

True or False with correction

Q300. Fertilizer can completely replace sunlight for a green plant.

Q301. Fertilizer affects only the leaves and never the stem.

Q302. Both plants should receive the same light when testing fertilizer.

Correct the statements

Q303. Correct the wrong words: A plant given suitable fertilizer normally grows more slowly and becomes smaller in the comparison experiment.

Q304. Correct the statement: Fertilizer is the only factor needed for healthy plant growth.

Q305. Correct the statement: A plant does not need air to grow well.

Definitions

Q306. What is meant by fertilizer?

Give reasons

Q307. Why do farmers add suitable amounts of fertilizer to nutrient-poor soil?

Q308. Why are the two fertilizer-test pots placed in the same location?

Q309. Why should seedlings have similar starting sizes in a fertilizer test?

What happens

Q310. What happens if fertilizer is provided but the plant is kept in complete darkness?

Q311. What may happen if a very large amount of fertilizer is added at once?

Compare

Q312. Compare plants given water only and water plus suitable fertilizer in the school experiment.

Q313. Compare the sunlight and fertilizer growth experiments in changed and fixed conditions.

Functions and importance

Q314. How did Nile silt help agriculture?

Matching

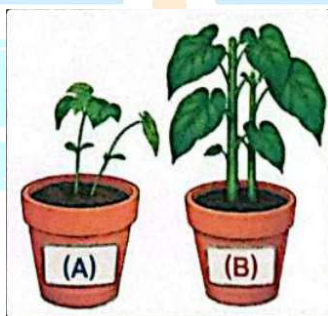
Q315. Match: 1) Sunlight 2) Fertilizer 3) Ruler. A) Measures height B) Supplies mineral nutrients C) Provides energy for making food.

Experiments and fair tests

Q316. Describe a fair fertilizer experiment and how to record its results.

Label and interpret the diagram

Q317. Both plants began at a similar size and were grown under the same conditions except fertilizer. Which likely received fertilizer, and what visible evidence supports your answer?



Observe and apply

Q318. How can flowing river water help form soil suitable for roots?

Thinking and application

Q319. If a plant could choose between plenty of light and nutrient-rich soil, which would be best for healthy growth?

Q320. Why can plants sometimes grow well without artificial fertilizer?



Chapter 5

From Flower to Fruit

Source guide: Ministry textbook pp. 52–63; Al Moasser main book PDF pp. 102–133; related assessment, supplement and exam questions.



Lesson 5.1 Structure of a Luffa Flower

Complete the sentences

Q321. The _____ is the plant part responsible for reproduction and seed production.

Q322. A male luffa flower has _____ in its centre that produce _____.

Q323. A female luffa flower has a _____ in its centre and a _____ at its base.

Q324. Both male and female luffa flowers have _____ and _____.

Q325. Luffa pollen looks like a _____ powder.

Choose the correct answer

Q326. Which structure is absent from a normal female luffa flower?

- A) Sepals
- B) Petals
- C) Pistil
- D) Stamens.

Q327. Which flower can develop a fruit after successful pollination?

- A) Male luffa flower
- B) Female luffa flower
- C) Either flower without pollination
- D) A detached petal.

Q328. Which is the correct order from the centre outwards in a male luffa flower?

- A) Stamen, petals, sepals
- B) Sepals, petals, pistil
- C) Petals, sepals, stamen
- D) Pistil, petals, sepals.

Choose all correct answers

Q329. Select parts present in a male pumpkin flower:

- A) Sepals
- B) Petals
- C) Stamens
- D) A fruit-forming swelling at the base.

Q330. Which statements describe a female luffa flower?

- A) It has a pistil
- B) It has a swelling at the base
- C) It produces pollen in stamens
- D) It can form a fruit.

True or False with correction

Q331. A male luffa flower and a female luffa flower have exactly the same structure.

Q332. A male luffa flower has a pistil and a swelling at its base.

Q333. Both male and female luffa flowers can have yellow petals.

Correct the statements

Q334. Correct the wrong word: Leaves are responsible for seed production in flowering plants.

Q335. Correct the wrong colour: Male luffa flowers produce green pollen.

Q336. Correct the wrong part: The stamen is the central part of a female luffa flower.

Write the scientific term

Q337. The flower structure that produces pollen grains.

Q338. The female flower structure whose tip receives pollen.

Q339. Small grains produced by stamens and transferred to female flower parts during pollination.

Q340. The green outer flower parts that protect the flower bud.

Q341. The coloured flower parts that help attract pollinating insects.

Q342. The flower with stamens but no fruit-forming swelling at its base in luffa.

Q343. The flower with a pistil and a fruit-forming swelling at its base in luffa.

Give reasons

Q344. Why do male and female luffa flowers differ in structure?

Q345. Why are petals useful to insect-pollinated flowers?

Compare

Q346. Compare male and female luffa flowers in central part, base and reproductive role.

Functions and importance

Q347. State the functions of the sepals, petals, stamens and pistil.

Odd one out

Q348. Sepals - Pistil - Swelling below the flower - Pollen-producing stamens.
Explain for a female luffa flower.

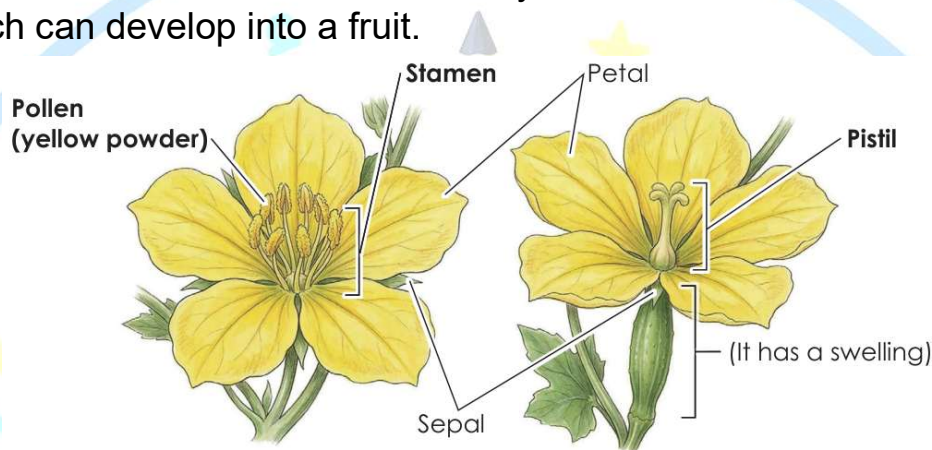
Q349. Petals - Pistil - Stamens - Pollen grains. Explain for a male luffa flower.

Arrange in order

Q350. Arrange the visible parts from outside to centre in a female luffa flower: pistil, sepals, petals.

Observe and apply

Q351. Observe the two luffa flowers. Identify the male and female flowers and explain which can develop into a fruit.



Draw and label

Q352. Draw a male and a female luffa flower. Label the shared parts and the different reproductive parts.

Lesson 5.2 How to Use a Microscope

Complete the sentences

Q353. A microscope helps us see _____ objects and their fine details.

Q354. Look through the _____ lens to view a microscope specimen.

Q355. The _____ lenses are nearest the specimen.

Q356. The prepared slide rests on the _____ and is held by _____.

Q357. The _____ directs light towards the specimen, while the _____ helps focus the image.

Q358. Use a microscope on a _____, bright surface away from direct _____.

Q359. Start observation with the _____ magnification objective lens.

Q360. Total magnification equals eyepiece magnification _____ objective magnification.

Q361. At higher magnification, the field of view becomes _____ and usually _____.

Choose the correct answer

Q362. Which part carries the objective lenses and rotates to select one?

- A) Stage
- B) Revolving nosepiece
- C) Clips
- D) Cover glass.

Q363. Which part helps make the image clear?

- A) Adjustment knob
- B) Arm alone
- C) Clips alone
- D) Base alone.

Q364. At low magnification, the view is usually:

- A) wide and bright
- B) narrow and dark
- C) wide and dark
- D) invisible.

Q365. To focus while looking through the eyepiece, move the objective lens:

- A) gradually away from the slide
- B) rapidly into the slide
- C) sideways through the cover glass
- D) directly against the specimen.

Choose all correct answers

Q366. Which are microscope parts?

- A) Reflector
- B) Revolving nosepiece
- C) Objective lens
- D) A separate prepared cover glass.

True or False with correction

Q367. A microscope has only one lens.

Q368. Different objective lenses can have different magnification powers.

Q369. The object appears upside down and reversed left to right in the microscope used in the book.

Q370. Moving a slide right makes its image move right.

Q371. Higher magnification is always the best starting point for finding a specimen.

Correct the statements

Q372. Correct the wrong term: The eyepiece is the lens closest to the specimen.

Q373. Correct the wrong words: Place a microscope on an uneven surface in direct sunlight.

Q374. Correct the statement: The adjustment knob holds the slide on the stage.

Write the scientific term

Q375. An instrument used to magnify very small objects for observation.

Q376. The cylinder that holds the eyepiece and connects it with the objective system.

Q377. The curved supporting part used when carrying a microscope, while supporting its base.

Q378. The number of times larger the observed image appears compared with the object.

Q379. A specimen arranged on a glass slide and covered with a thin cover glass for viewing.

Give reasons

Q380. Why do we use a microscope to examine pollen grains?

Q381. Why should observation begin at low magnification?

Q382. Why should you look from the side when bringing the objective close to a slide?

Q383. Why move the objective away from the slide when focusing through the eyepiece?

Q384. Why is the cover glass lowered slowly from one side?

Q385. Why is filter paper used around a prepared slide?

What happens

Q386. What happens if the microscope is used with insufficient light?

Q387. What may happen if the slide is not secured by the clips?

Q388. What happens if excess water remains around the cover glass?

Q389. What happens to the image when you move the slide to the right?

Q390. What happens to the view when you change from low to high magnification?

Compare

Q391. Compare low and high microscope magnification in field of view and brightness.

Q392. Compare a glass slide and cover glass.

Functions and importance

Q393. State the functions of the eyepiece lens and objective lens.

Q394. State the functions of the reflector, stage, clips and adjustment knob.

Arrange in order

Q395. Arrange slide preparation: absorb excess water; place specimen on slide with a drop of water if needed; lower the cover glass from one side.

Q396. Arrange: A) Focus while increasing the slide-lens distance B) Adjust the reflector C) Put the slide on the stage D) Bring the objective close while watching from the side.

Calculations

Q397. An eyepiece is $10\times$ and an objective is $40\times$. Calculate total magnification.

Q398. An eyepiece is $10\times$ and an objective is $20\times$. Calculate total magnification.

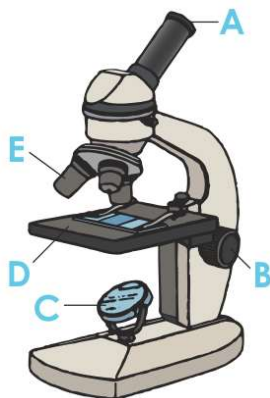
Q399. An eyepiece is $10\times$ and an objective is $60\times$. Calculate total magnification.

Experiments and fair tests

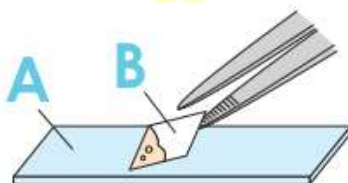
Q400. Describe how to examine luffa pollen under a microscope.

Label and interpret the diagram

Q401. Write the names of microscope parts A, B, C, D and E.



Q402. Name parts A and B used when preparing a microscope slide.



Observe and apply

Q403. What does an objective magnification of 100× mean?

Q404. Compare luffa pollen seen by eye and under the microscope.

Draw and label

Q405. Label a microscope with eyepiece, tube, arm, revolving nosepiece, objective lenses, stage, clips, adjustment knob and reflector.

Thinking and application

Q406. To make the image move upwards in your field of view, in which direction should you move the slide?

Lesson 5.3 Pollination and How Fruits Grow

Complete the sentences

Q407. Transfer of pollen to the tip of the pistil is called _____.

Q408. _____ can carry pollen from a male luffa flower to a female one.

Q409. After successful pollination, the swelling at the base of the female flower develops into a _____ containing _____.

Q410. In the experiment, the female flower buds are covered with _____ before they open.

Choose the correct answer

Q411. Which transfer represents pollination in luffa?

- A) Male stamen to female pistil
- B) Female pistil to a root
- C) Leaf to stem
- D) Fruit to soil.

Q412. What happens to an unpollinated female luffa flower in the experiment?

- A) A normal fruit always grows
- B) It withers and the undeveloped fruit falls
- C) It becomes a male flower
- D) Its petals become seeds.

Choose all correct answers

Q413. Which statements are correct?

- A) Bees can transfer pollen
- B) Pollination is important for normal fruit formation
- C) Pollen is made by the female luffa pistil
- D) Seeds form inside the developing fruit.

True or False with correction

Q414. The male luffa flower becomes the fruit after pollination.

Q415. A seed can develop into a new plant when conditions are suitable.

Correct the statements

Q416. Correct the wrong term: Germination is the transfer of pollen from a male flower to a female flower.

Q417. Correct the wrong part: After pollination, the female flower's swelling becomes a single seed.

Write the scientific term

Q418. The structure that develops from the flower and contains the plant's seeds.

Q419. Animals such as bees that transfer pollen as they move between flowers.

Give reasons

Q420. Why are bees important for fruit production in luffa?

Q421. Why cover female flower buds before they open in the pollination experiment?

Q422. Why is the bag replaced after hand-pollinating flower A?

What happens

Q423. What happens if the stamens of all male pumpkin flowers are removed before they release pollen?

Q424. What happens if the pistil of a female luffa flower is removed?

Q425. Two female luffa flowers are placed together with no pollen source. Will this alone produce normal fruits?

Q426. What might happen to insect-pollinated plants if their pollinating insects disappeared?

Q427. If the bags are removed from both female flowers and the flowers are left in the garden without hand pollination, what could happen?

Compare

Q428. Compare flower A that receives pollen and flower B that is kept bagged without pollen.

Matching

Q429. Match: 1) Flower 2) Fruit 3) Seed 4) Bee. A) Can germinate B) Carries pollen C) Reproductive part D) Contains seeds.

Arrange in order

Q430. Arrange: a new plant grows; pollination occurs; the female flower's base grows into a fruit; seeds form and mature; a seed germinates.

Experiments and fair tests

Q431. Describe the experiment proving that pollination is needed for luffa fruit formation.

Thinking and application

Q432. Why must both experimental flowers be female and at a similar stage of development?



Chapter 6

Human Growth and Reproduction

Source guide: Ministry textbook pp. 64–71; Al Moasser main book PDF pp. 134–152; related assessment, supplement and exam questions.



Lesson 6.1 Stages of Human Growth

Complete the sentences

- Q433.** Reproduction produces new individuals of the same _____.
Q434. Growth includes changes in body _____ and _____ over time.
Q435. Infancy begins at _____, after about _____ months inside the mother's body.
Q436. During childhood, bones and muscles become _____.
Q437. Youth is followed by _____, then _____.

Choose the correct answer

- Q438.** Which process continues human life across generations?
A) Reproduction
B) Digestion alone
C) Sleeping alone
D) Movement alone.
- Q439.** Which stage begins immediately after birth?
A) Childhood
B) Infancy
C) Youth
D) Adulthood.
- Q440.** The stage associated in the book with starting to walk, talk and go to school is:
A) old age
B) childhood
C) adulthood
D) the time before birth.
- Q441.** Which stage is associated with taking responsibility for a family and community?
A) Infancy
B) Adulthood
C) Early childhood
D) Before birth.

Choose all correct answers

- Q442.** Which describe infancy?
A) Begins at birth
B) Small body size
C) Full independence

D) Dependence on caregivers for food and protection.

True or False with correction

Q443. A human stays the same size and shape throughout life.

Q444. Growth and reproduction mean exactly the same thing.

Q445. Old age comes before youth and adulthood.

Answer: False. It Correct the statements

Q446. Correct the wrong term: Producing new individuals is called growth.

Q447. Correct the wrong number: Infancy begins after about five months in the mother's body.

Q448. Correct the wrong word: During childhood, bones and muscles usually become weaker.

Write the scientific term

Q449. The process in which an organism produces new individuals of its own kind.

Q450. Changes in a living organism's size, shape and body development over time.

Q451. The stage between childhood and adulthood in the book's sequence.

Q452. The later life stage in which people may need more rest and health care.

Give reasons

Q453. Why is reproduction important to living organisms?

Q454. Why does an infant depend on its mother or other caregivers?

What happens

Q455. What would happen to a species if none of its members reproduced?

Q456. What difficulties would a child have if their bones and muscles did not grow and strengthen normally?

Compare

Q457. Compare infancy and childhood.

Q458. Compare youth and old age as described in the curriculum.

Q459. Compare infancy and adulthood in independence and responsibility.

Matching

Q460. Match: 1) Infancy 2) Childhood 3) Adulthood 4) Old age. A) More rest and health care B) Dependence for feeding C) Starting school D) Family and community responsibilities.

Arrange in order

Q461. Arrange the stages: old age, youth, infancy, adulthood, childhood.

Observe and apply

Q462. Which growth stage are most Grade 5 pupils in? Give two abilities they have that an infant has not yet developed.

Thinking and application

Q463. Explain why growth is more than becoming larger.

Lesson 6.2 Similarities between Parents and Children

Complete the sentences

Q464. A human life begins from a _____ and a _____.

Q465. Traits passed from parents to children are called _____ features.

Q466. Eye colour, hair colour and _____ colour are examples of inherited features.

Choose the correct answer

Q467. Which is an acquired skill rather than an inherited feature?

- A) Natural eye colour
- B) Natural hair colour
- C) Learning a new language
- D) Skin colour.

Q468. Why do children often resemble their parents?

- A) Only because they share meals
- B) They inherit features
- C) They wear identical clothes
- D) They read the same books.

Choose all correct answers

Q469. Select inherited features:

- A) Eye colour
- B) Natural hair colour
- C) Ability to read a particular book

D) Skin colour.

True or False with correction

Q470. Children must be identical to one parent in every feature.

Correct the statements

Q471. Correct the wrong word: Children inherit their natural features from their friends.

Q472. Correct the wrong example: Eye colour and clothes colour are inherited features.

Write the scientific term

Q473. Features passed from parents to their children.

Functions and importance

Q474. What role do parents or caregivers play in children's development?

Classification

Q475. Classify skin colour, reading, natural hair colour and playing a musical instrument as inherited features or learned skills.

Observe and apply

Q476. A child has one parent's eye colour and the other parent's hair colour. What does this show?

Lesson 6.3 Conditions for Healthy Growth

Complete the sentences

Q477. Three conditions for healthy growth are a healthy _____, enough _____ and proper _____.

Q478. During sleep, the _____ rests and the _____ grows and repairs itself.

Q479. Proper exercise helps strengthen the _____ and _____.

Q480. Milk, vegetables and fruits provide useful _____.

Choose the correct answer

Q481. Which habit helps the brain rest?

- A) Staying awake all night
- B) Enough sleep

- C) Watching screens all night
- D) Skipping sleep.

Choose all correct answers

Q482. Select habits that support healthy growth:

- A) Varied healthy food
- B) Enough sleep
- C) Proper exercise
- D) Eating only sweets.

True or False with correction

Q483. Exercise weakens the heart and muscles when it is suitable and done regularly.

Q484. Sleeping alone can replace a healthy diet.

Correct the statements

Q485. Correct the statement: The brain becomes more tired because sleep gives it no rest.

Write the scientific term

Q486. Substances in food that the body needs for energy, growth and health.

Give reasons

Q487. Why should children eat a varied healthy diet?

Q488. Why is regular suitable exercise important?

Q489. Why is enough sleep important for children?

What happens

Q490. What may happen if a child eats only sweets, stays up late and does not exercise?

Q491. What might happen if a pupil regularly gets too little sleep?

Matching

Q492. Match each action to a condition for healthy growth: 1) Drinking milk and eating vegetables 2) Active play 3) Resting at night. A) Exercise B) Healthy diet C) Sleep.

Observe and apply

Q493. Choose one healthy habit and explain how it could help studying or sport.

Thinking and application

Q494. Write a simple healthy-growth plan for a pupil.



Chapter 7

Animal Growth and Reproduction

Source guide: Ministry textbook pp. 72–79; Al Moasser main book PDF pp. 153–169; related assessment, supplement and exam questions.



Lesson 7.1 Animals that Give Birth to Babies

Complete the sentences

Q495. A newborn cat is called a _____.

Q496. A mother cat carries developing young _____ her body before birth.

Q497. After birth, a mother cat feeds her kittens with _____.

Q498. As an animal grows, its size _____ and some of its features _____.

Choose the correct answer

Q499. Which animal gives birth to live young?

- A) Hen
- B) Cat
- C) Duck
- D) Turtle.

Q500. Which depends most completely on its mother?

- A) Adult cat
- B) Newborn kitten
- C) Independent adult dog
- D) Mature cat.

Q501. Which statement does NOT describe a typical adult cat?

- A) Larger than a newborn
- B) Independent feeding
- C) Completely dependent on its mother
- D) Able to live independently.

Choose all correct answers

Q502. A mother cat:

- A) carries developing kittens inside her body
- B) cleans newborn kittens
- C) feeds them milk
- D) lays eggs in water.

True or False with correction

Q503. Newborn kittens are already the same size as their adult parents.

Q504. Cats and dogs both give birth to live young and feed them milk.

Correct the statements

Q505. Correct the wrong stage: An adult cat depends completely on its mother for feeding and care.

Give reasons

Q506. Why does a mother cat care for newborn kittens?

Q507. Why do young animals resemble their parents in some features?

What happens

Q508. What does the mother cat do after giving birth?

Q509. What may happen if newborn kittens lose all care and feeding?

Compare

Q510. Compare a newborn kitten, a growing young cat and an adult cat in size and dependence.

Give examples

Q511. Give four examples of animals in the book that give birth to live young.

Arrange in order

Q512. Arrange the stages: adult cat, newborn kitten, growing young cat.

Lesson 7.2 Animals that Lay Eggs**Complete the sentences**

Q513. Young animals coming out of eggs are said to _____.

Q514. Fish such as tilapia reproduce by laying _____ in _____.

Q515. Many fish lay _____ numbers of eggs to increase the chance that some young survive. _____

Choose the correct answer

Q516. Which animal lays eggs?

- A) Horse
- B) Fox
- C) Turtle
- D) Cow.

Q517. What is the emergence of a young animal from an egg called?

- A) Hatching
- B) Germination
- C) Pollination
- D) Evaporation.

Q518. Why do many fish produce numerous eggs?

- A) Every egg is guaranteed to survive
- B) Many eggs and young face danger
- C) To feed all other animals deliberately
- D) Fish do not reproduce.

True or False with correction

Q519. All animals reproduce by giving birth to live babies.

Q520. Ducks and turtles are examples of egg-laying animals.

Correct the statements

Q521. Correct the wrong animal: A hen releases a huge number of eggs into open water.

Q522. Correct the statement: Cats and tilapia use the same method of producing young.

Write the scientific term

Q523. The process in which a young animal emerges from an egg.

What happens

Q524. What might happen if a fish species that normally lays many eggs produced only very few in open water?

Compare

Q525. Compare cats and the egg-laying fish studied in the book.

Q526. Compare a cat and a bird such as a chicken in the arrival and feeding of their young.

Give examples

Q527. Name an animal that lays eggs on land and one that lays eggs in water.

Thinking and application

Q528. Why does the book contrast producing many fish eggs with caring for a few kittens?

Lesson 7.3 Comparing Animals and Preserving the Species

Complete the sentences

Q529. Reproduction helps living organisms preserve their _____.

Q530. Protected areas where animals can live and reproduce safely are called _____.

Q531. Two Egyptian examples are _____ National Park and _____ National Park.

Choose the correct answer

Q532. Which place is set up to help protect wildlife?

- A) Nature reserve
- B) Shopping centre
- C) Amusement park
- D) Car park.

Q533. Which is NOT a purpose of a nature reserve?

- A) Protecting animals
- B) Supporting safe reproduction
- C) Reducing animal numbers through uncontrolled hunting
- D) Preserving species.

True or False with correction

Q534. Nature reserves help prevent the decline of protected species.

Correct the statements

Q535. Correct the wrong word: Nature reserves aim to decrease the numbers of endangered animals.

Write the scientific term

Q536. A protected natural area that helps conserve organisms and their habitats.

Give reasons

Q537. Why do countries establish nature reserves?

What happens

Q538. What may happen if animals are hunted without control?

Q539. What happens to an animal species if it cannot produce a new generation?

Q540. What if animals cannot reproduce safely even inside a nature reserve?

Classification

Q541. Classify cow, chicken, turtle, dog, tilapia, cat, horse, camel, frog and the egg-laying snake example into live-birth and egg-laying groups.

Odd one out**Q542.** Cow - Cat - Tilapia - Dog. Give the reason.**Q543.** Chicken - Duck - Cat - Egg-laying bird. Give the reason.**Complete the table****Q544.** Give method of reproduction, habitat and a similar animal for: cat, chicken and tilapia.

Animal	Reproduction	Habitat	Similar animal
Cat			
Chicken			
Tilapia			

Thinking and application**Q545.** Add one more row to the animal table with an animal, its reproduction method, habitat and a similar animal.**Q546.** Suggest two actions that help protect animal species.**Q547.** As a nature-reserve supervisor, suggest a plan to help threatened animals reproduce safely.

شرح وتدريبات

المرحلة الابتدائية

Chapter 8

Changes in Weather

Source guide: Ministry textbook pp. 80–91; Al Moasser main book PDF pp. 170–192; related assessment, supplement and exam questions.



Lesson 8.1 Clouds and Weather

Complete the sentences

Q548. The condition of the atmosphere at a place over a short time is called _____.

Q549. The proportion of the sky covered by clouds is called _____.

Q550. For the cloud-cover activity, divide the sky into _____ equal parts.

Q551. With no rain or snow falling, cloud cover from 0 to 6 eighths is classified as _____, and 7 to 8 eighths as _____.

Q552. When raindrops fall, call the weather _____; when snowflakes fall, call it _____.

Choose the correct answer

Q553. A cloud cover of 5 out of 8, with no precipitation, is classified as:

- A) sunny
- B) cloudy
- C) snowy
- D) necessarily stormy.

Q554. What is the minimum cloud cover classified as cloudy on the textbook's eight-part scale?

- A) $\frac{1}{8}$
- B) $\frac{4}{8}$
- C) $\frac{6}{8}$
- D) $\frac{7}{8}$.

Q555. Which is NOT a weather element?

- A) Temperature
- B) Wind
- C) Rain
- D) Earthquakes.

Choose all correct answers

Q556. Which cloud-cover values fall in the textbook's sunny category when no rain or snow falls?

- A) $\frac{2}{8}$
- B) $\frac{4}{8}$
- C) $\frac{7}{8}$
- D) $\frac{6}{8}$.

Q557. Which can change when weather changes?

- A) Cloud amount

- B) Cloud shape
- C) Cloud colour
- D) The number of compass directions.

True or False with correction

- Q558.** A cloudy sky must always be producing rain.
- Q559.** Weather describes the atmosphere over a short period of time.
- Q560.** If snow is falling, the weather should only be called cloudy.
- Q561.** A cloud cover of $\frac{4}{8}$ is classified as cloudy in the textbook activity.

Correct the statements

- Q562.** Correct the wrong word: We estimate cloud cover by measuring the location of clouds only.
- Q563.** Correct the wrong description: A sky covered by clouds in all eight parts is sunny.
- Q564.** Correct the statement: Weather means atmospheric conditions over a long period of many years.

Write the scientific term

- Q565.** The fraction of the sky hidden by clouds.

Definitions

- Q566.** What is meant by weather?

Give reasons

- Q567.** Why can the textbook call a day sunny even when some clouds are present?
- Q568.** Why do thick rain clouds often look dark from the ground?

What happens

- Q569.** What happens to the weather description if cloud cover rises from $\frac{4}{8}$ to $\frac{7}{8}$ with no rain?
- Q570.** What happens to the appearance of clouds as they become thicker and contain more droplets?
- Q571.** How would thin clouds with relatively few droplets usually look compared with thick rain clouds?

Compare

Q572. Compare clouds on a sunny day and thick clouds on a rainy or stormy day.

Complete the table

Q573. Classify cloud cover values of 0/8, 2/8, 4/8, 6/8, 7/8 and 8/8 when no rain or snow falls.

Cloud cover	Weather
0/8	
2/8	
4/8	
6/8	
7/8	
8/8	

Observe and apply

Q574. What should a four-day weather observation card record?

Thinking and application

Q575. Two pupils estimate cloud cover differently. How can they improve their comparison?

Lesson 8.2 Cloud Movement

Complete the sentences

Q576. Clouds move mainly because of the _____.

Q577. In the pattern taught for Egypt and Japan, clouds generally move from _____ to _____.

Q578. A fixed object used to compare cloud positions is a _____.

Q579. A _____ helps identify directions, and its marked north-seeking needle points towards _____.

Q580. Hold a compass _____ and wait for its needle to settle.

Choose the correct answer

Q581. Which is unsuitable as a fixed reference point?

- A) Building
- B) Tree
- C) Moving car
- D) Window frame.

Q582. Which tool identifies north, south, east and west?

- A) Ruler
- B) Compass
- C) Microscope
- D) Thermometer.

Choose all correct answers

Q583. Which are moving objects and therefore unsuitable as fixed reference points?

- A) A racing bicycle
- B) A tower
- C) A flying aeroplane
- D) A moving car.

True or False with correction

Q584. Clouds always keep exactly the same shape and size as they move.

Q585. The compass needle should be used while the compass is held vertically.

Q586. A fixed tree or building can help us observe cloud movement.

Correct the statements

Q587. Correct the wrong cause: The Sun directly pushes clouds across the sky.

Q588. Correct the wrong direction: Clouds generally move from east to west in the pattern taught for Egypt.

Q589. Correct the wrong word: A moving reference point gives the clearest comparison of cloud positions.

Write the scientific term

Q590. An instrument with a magnetic needle used to identify directions.

Q591. A stationary object used to compare the position of a moving object.

Give reasons

Q592. Why use a fixed reference point when tracking clouds?

Q593. Why use a compass when observing clouds?

What happens

Q594. What happens if you observe clouds only from a moving car and use the car's movement as your reference?

Matching

Q595. Match: 1) Cloud 2) Tree 3) Compass 4) Wind. A) Helps find directions B) Moves clouds C) Can be a fixed reference D) Moves with wind.

Odd one out

Q596. House - Tower - Flying aeroplane - Tree. Explain.

Experiments and fair tests

Q597. Describe how to observe cloud movement using a compass and a fixed object.

Thinking and application

Q598. Can cloud direction and speed vary during the day or between seasons?

Lesson 8.3 Weather Forecast

Complete the sentences

Q599. Weather satellites take images of cloud conditions from _____.

Q600. In the satellite images used in the book, the white areas represent _____.

Q601. A prediction of future weather is a weather _____.

Q602. Weather radar uses _____ waves to locate rain or snow.

Choose the correct answer

Q603. A large mass of clouds is approaching from the west. What is a reasonable forecast?

- A) It may become cloudy or rainy
- B) The sky must remain clear
- C) No change is possible
- D) It must snow everywhere.

Q604. If satellite images show no clouds over Egypt, the current weather is likely to be:

- A) sunny
- B) cloudy
- C) snowy
- D) heavy rain.

Q605. Which device observes the location and intensity of rainfall in real time?

- A) Weather radar
- B) Compass
- C) Microscope
- D) Ruler.

True or False with correction

Q606. Weather satellites can show cloud conditions over countries and continents.

Q607. Meteosat observes Europe only.

Q608. Looking at the local sky alone gives the complete information needed for an accurate weather forecast.

Correct the statements

Q609. Correct the wrong instrument: A compass takes cloud pictures from space.

Q610. Correct the wrong colour: Clouds appear blue in the satellite images shown in the book.

Q611. Correct the wrong waves: Weather radar uses visible light waves to observe rainfall.

Write the scientific term

Q612. A prediction of future atmospheric conditions using weather information.

Q613. An artificial object in space used to observe weather over wide areas.

Q614. A weather-observation device that uses radio waves to detect precipitation.

Q615. A hot, dry, dusty wind event described in the Egyptian spring-weather enrichment section.

Give reasons

Q616. Why are satellites useful for forecasting?

Q617. Why can approaching western clouds help forecast a change in local weather?

Q618. Why can the Nile contribute moisture to the surrounding air?

What happens

Q619. What weather may continue for a while if the western area is clear of clouds?

Q620. How would weather forecasting be affected if weather satellites stopped working?

Compare

Q621. Compare a compass, weather satellite and weather radar in use.

Functions and importance

Q622. What does the book say Meteosat observes, and from approximately what altitude?

Q623. Why is weather radar useful for short-term forecasts?

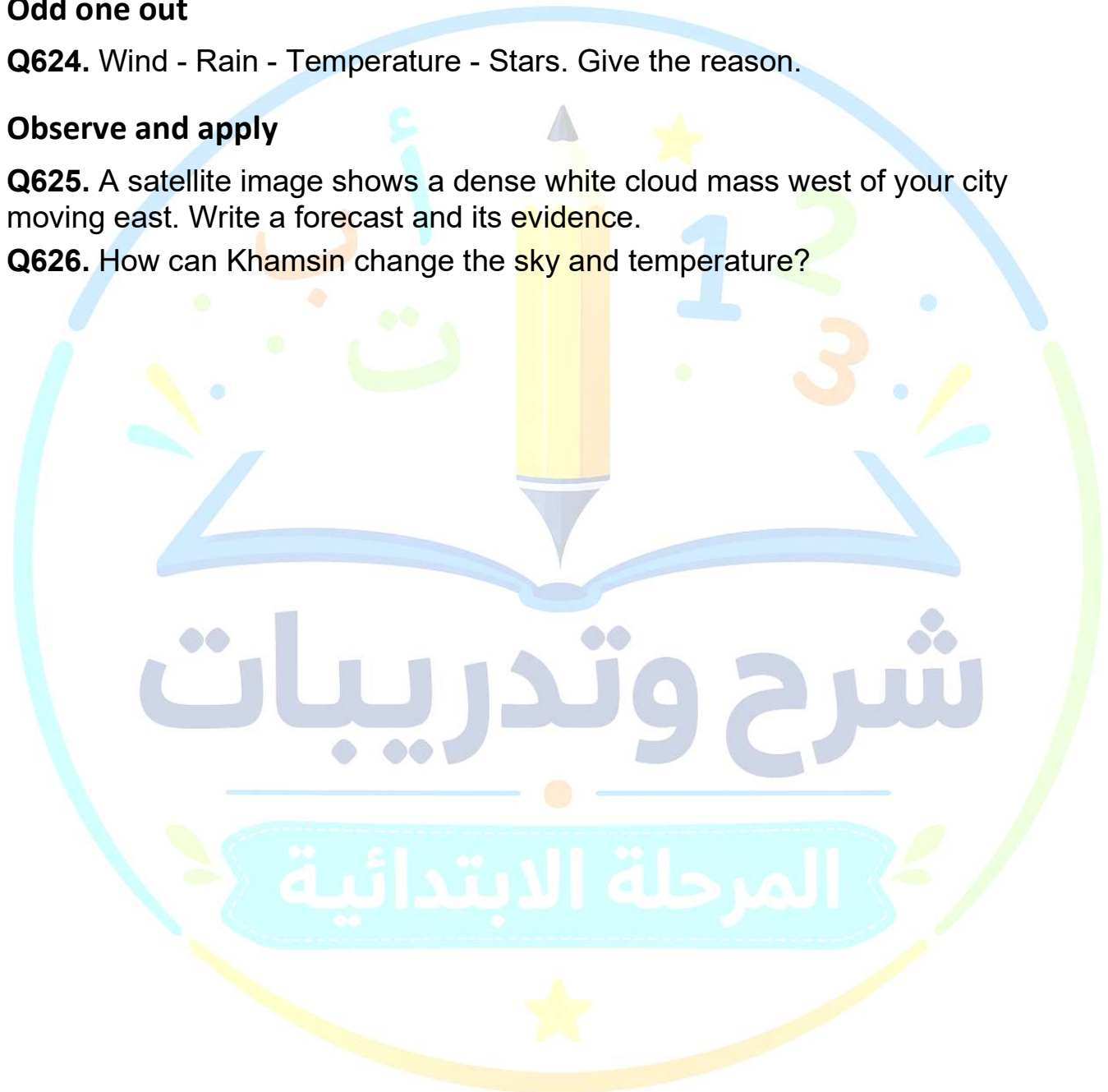
Odd one out

Q624. Wind - Rain - Temperature - Stars. Give the reason.

Observe and apply

Q625. A satellite image shows a dense white cloud mass west of your city moving east. Write a forecast and its evidence.

Q626. How can Khamsin change the sky and temperature?



Chapter 9

Water Cycle

Source guide: Ministry textbook pp. 92–103; Al Moasser main book PDF pp. 193–209; related assessment, supplement and exam questions.



Lesson 9.1 Water Evaporation

Complete the sentences

Q627. Liquid water changing from its surface into water vapour is called _____.

Q628. Water vapour is the _____ state of water and is _____.

Q629. Evaporation becomes faster in _____ weather and when there is _____.

Q630. In the two-cup experiment, the _____ cup loses more water to the surrounding air.

Choose the correct answer

Q631. Which correctly describes evaporation?

- A) Liquid to gas
- B) Gas to liquid
- C) Liquid to solid
- D) Solid to liquid.

Q632. Laundry usually dries fastest on a:

- A) sunny, warm, windy day
- B) cold rainy day
- C) still damp day
- D) snowy day.

Q633. Why can a puddle become smaller after sunshine?

- A) Water vanishes from existence
- B) Water evaporates into the air
- C) All water becomes ice
- D) Water becomes soil.

Q634. What happens in a tightly covered cup of water?

- A) Evaporation is impossible
- B) Vapour can form but is trapped and can condense
- C) Water must leak through glass
- D) The water immediately freezes.

Choose all correct answers

Q635. Which are examples of evaporation?

- A) Drying laundry
- B) A shrinking puddle
- C) Droplets forming outside a cold cup
- D) Water vapour leaving a river surface.

True or False with correction

Q636. Water disappears from an undamaged open glass because it leaks through the glass.

Q637. Heating can increase the rate of evaporation.

Q638. Water in a sealed cup cannot change into vapour at all.

Correct the statements

Q639. Correct the wrong state: During evaporation, liquid water becomes solid water.

Q640. Correct the statement: Wet clothes dry fastest when temperature is very low.

Write the scientific term

Q641. The invisible gaseous form of water present in the air.

Definitions

Q642. What is meant by evaporation?

Give reasons

Q643. Why do clothes dry faster in sunlight and wind?

Q644. Why does the water level in an open cup fall after several days?

Q645. Why does a tightly covered cup retain almost the same total amount of water?

What happens

Q646. What happens to a puddle's evaporation rate if the surrounding temperature rises?

Q647. Compare equal water containers left in a warm sunny place and a cool dark place.

Q648. What happens to drying clothes on a day with very high humidity, with other conditions unchanged?

Compare

Q649. Compare the observations in the open and covered cups after several days.

Experiments and fair tests

Q650. Describe the two-cup experiment that shows where water goes.

Thinking and application

Q651. Does a shrinking puddle prove that all its water has evaporated?

Lesson 9.2 Water in the Air

Complete the sentences

Q652. Cooling water vapour until it becomes liquid is called _____.

Q653. Droplets outside a cold glass come from _____ in the surrounding _____.

Q654. Water vapour forms droplets on a surface when it is cooled sufficiently by the _____ surface.

Choose the correct answer

Q655. Which is an example of condensation?

- A) Freezing water
- B) Drying clothes
- C) Droplets on a cold window
- D) Melting ice.

Q656. What is cooled to form droplets outside an iced-water glass?

- A) Water vapour in the surrounding air
- B) Glass turning to liquid
- C) Sand
- D) Water leaking through the glass.

Q657. Where can cloud droplets form?

- A) Where moist air rises and cools
- B) Only inside soil
- C) Only in a hot oven
- D) Nowhere in the atmosphere.

True or False with correction

Q658. Condensation changes water vapour into liquid water.

Q659. Droplets outside a sealed cold cup prove that water leaked through the glass.

Q660. Invisible water vapour and visible tiny water droplets are the same state of matter.

Correct the statements

Q661. Correct the wrong process: Ice turning into water droplets is condensation.

Q662. Correct the wrong word: Water vapour heats up and condenses in the upper atmosphere.

Q663. Correct the wrong word: A hot surface helps nearby water vapour condense into droplets.

Definitions

Q664. What is meant by condensation?

Give reasons

Q665. Why can water droplets appear on leaves early in the morning without rain?

Q666. Why do droplets form on a car window on a cold morning?

What happens

Q667. What happens when water vapour in the air touches a sufficiently cold cup?

Q668. What may be observed under a cool glass plate placed over warm water?

Compare

Q669. Compare evaporation and condensation in starting state, final state, heat effect and example.

Classification

Q670. Classify drying wet hair, droplets on a cold bottle, a drying floor and dew on leaves as evaporation or condensation.

Experiments and fair tests

Q671. Describe the covered cold-cup experiment and its conclusion.

Thinking and application

Q672. Why is covering the cold cup useful when investigating the source of outside droplets?

Lesson 9.3 Where Does Water Go

Complete the sentences

Q673. The continuous movement of water between Earth's surface and the atmosphere is the _____.

Q674. The simplified water journey is sea → _____ → _____ → sea.

Q675. The _____ supplies the main energy that drives evaporation in the water cycle.

Q676. Rising water vapour cools and _____ into droplets that form _____.

Q677. Water falls as rain, or as _____ when conditions are cold enough.

Choose the correct answer

Q678. Which sequence is correct?

- A) Evaporation, cloud formation, rain, return to the sea
- B) Rain, evaporation, river, first cloud
- C) Sea, soil only, no air
- D) Cloud, seed, flower, sea.

Q679. What supplies energy for evaporation from seas and rivers?

- A) Sun's heat
- B) Coldness alone
- C) Starlight alone
- D) Soil colour.

Choose all correct answers

Q680. Select processes or events in the water cycle:

- A) Evaporation
- B) Condensation and cloud formation
- C) Rain or snow
- D) Water returning through rivers.

True or False with correction

Q681. The water cycle ends permanently when water reaches the sky.

Q682. The sea is the only possible starting point of the water cycle.

Q683. Water changes state during the water cycle.

Correct the statements

Q684. Correct the statement: Evaporation is the only step in the water cycle.

Q685. Correct the statement: Water changes only from gas to liquid in its natural cycle.

Q686. Correct the statement: The Sun is the only factor involved in the water cycle.

Q687. Correct the statement: The total amount of water on Earth continually disappears during evaporation.

Write the scientific term

Q688. Tiny water droplets and sometimes ice crystals gathered in the atmosphere.

Q689. The solid form of water found as ice or snow.

Definitions

Q690. What is meant by the water cycle?

Give reasons

Q691. Why does rising moist air form cloud droplets when it cools sufficiently?

Q692. Why does water continue circulating even though living organisms use it?

What happens

Q693. What happens when cloud droplets combine and become too heavy to remain suspended?

Q694. What would happen if rising moist air did not cool enough to condense?

Q695. What would happen to the water cycle without the Sun's heat?

Q696. What happens to snow on a mountain when it receives enough heat to melt?

Q697. Where does some Nile water go when it seems to disappear in hot desert conditions?

Q698. What would be missing from the usual rain-forming process if there were no clouds?

Compare

Q699. Compare the roles of evaporation and condensation in the water cycle.

Functions and importance

Q700. How does the Aswan High Dam help manage Nile water?

Q701. How can dew support small desert organisms?

Arrange in order

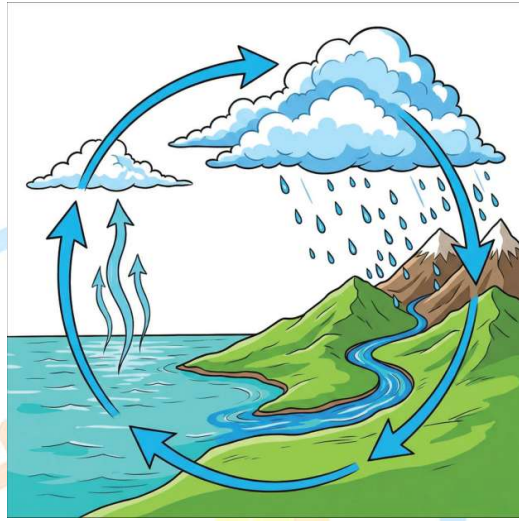
Q702. Arrange these numbered stages: 1) Evaporation 2) Rainfall 3) Return to the sea 4) Cloud formation.

Observe and apply

Q703. Where can rainwater go after reaching land?

Draw and label

Q704. Copy the water-cycle diagram and label evaporation, condensation, rainfall and water returning to the sea.



Thinking and application

Q705. Why is water conservation important even though water is recycled naturally?

Q706. Imagine global conditions stopped liquid water from evaporating. How would this affect the cycle?

Q707. Humid air is high in the atmosphere. Is humidity alone enough to guarantee rain?

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