1. When an opossum sees a predator, it rolls over on its back as if it is dead. How might this behavior help the opossum survive in its environment? SC.5.L.17.1

A. The behavior makes a predator unable to see the opossum.

B. The behavior helps the opossum guard sources of food for itself.

C. The behavior attracts a predator's attention.

D. The behavior fools the predator into thinking the opossum is not a fresh source of food.

---

2. Peter is dissolving sugar in water. What can Peter do to make the sugar dissolve easier? SC.5.P.8.3

A. add salt to the water

B. cool the sugar

C. cool the water

D. heat the water

---

3. Caterpillars grow up to be butterflies. Butterflies can protect themselves by tasting bitter or having fake eyes on their wings. SC.5.L.17.1

How does this caterpillar protect itself?

A. It makes loud sounds.

B. It smells bad.

C. It is ugly.

D. It has spines.

---

4. Which of the following causes the change from day to night? SC.4.E.5.4

A. the revolution of the Moon around the Earth

B. the revolution of the Earth around the Sun

C. the rotation of the Earth

D. the rotation of the Sun

---

5. Which of the following is one of the main purposes of leaves? SC.3.L.14.1

A. to absorb sunlight

B. to attract insects

C. to take in water

D. to produce seeds

---

6. _____ is the spinning of a planet or moon on its axis. SC.4.E.5.4

A. Rotation

B. Vibration

C. Revolution

D. Orbit

---

7. Which of the following describes the stage that occurs after condensation in the water cycle? SC.5.E.7.1

A. radiation

B. evaporation

C. precipitation

D. respiration

---

8. Limestone is a nonrenewable resource that is mined in Florida. Which of the following must be true about the supply of limestone in Florida? SC.4.E.6.3

A. The supply of limestone has decreased over the past 50 years.

B. The supply of limestone is constantly being renewed.

C. The supply of limestone has not changed over the past 50 years.

D. The supply of limestone has increased over the past 50 years.

---

9. Each of the following resources can be found in Florida. Which of these is a nonrenewable resource that is only found deep in the ground? SC.4.E.6.3

A. oil

B. solar energy

C. wind energy

D. water

---

10. Organisms in an ecosystem usually have adaptations that help them to survive in their environment.

Suppose the environment of a desert ecosystem changes to become much colder and wetter. Which organisms in this ecosystem will most likely be affected? SC.5.L.17.1

A. Only the animals that live in the ecosystem will be affected.

B. Only the plants that live in the ecosystem will be affected.

C. None of the organisms that live in the ecosystem will be affected.

D. All of the organisms that live in the ecosystem will be affected.

---

11. The _____ breaks down large food particles into very small particles.

These small particles are absorbed into the bloodstream through the _____. SC.5.L.14.1

A. stomach; small intestine

B. digestive system; nervous system

C. mouth; kidneys

D. small intestine; stomach

12.

Which statement describes the flow of energy through the television set shown above? SC.5.P.13.1

A. Sound energy changes into light energy and electrical energy.

B. Light energy changes into sound energy and electrical energy.

C. Heat energy changes into electrical energy and sound energy.

D. Electrical energy changes into light and sound energy.

13. Jeremy throws his ball up in the air, but the ball falls back to the ground. What force made the ball move without ever touching the ball? SC.5.P.13.1

A. magnetism pulling on the ball

B. gravity pulling on the ball

C. Jeremy's hand pushing on the ball

D. the air pressure pushing on the ball

---

14. A period of revolution around the Sun for a certain planet depends on _____. SC.4.E.5.4

A. the total surface area of the planet.

B. the planet's average temperature.

C. the planet's size compared to the Sun's size.

D. the distance of the planet from the Sun.

---

15. Moving objects usually experience friction. Friction changes some of these objects' _____ energy into thermal energy. SC.5.P.10.1

A. mechanical

B. heat

C. sound

D. light

---

16. Scientific inquiries usually begin with the formulation of a question. Can a scientific inquiry be constructed about any question? SC.5.N.1.1

A. Yes; one universal scientific method can be applied to any question.

B. No; the question must be testable or scientifically investigable.

C. No; only questions about supernatural events may be investigated.

D. Yes; it is possible to investigate any question through scientific inquiry.

17. Which list puts the following things in correct order from smallest to largest? SC.5.E.5.1

A. solar system Earth universe galaxy

B. Earth galaxy solar system universe

C. Earth solar system galaxy universe

D. solar system galaxy universe Earth

18.

The trees in the picture above are adapted to live in environments with seasonal changes. What do these trees do to help avoid water loss in the winter? SC.5.L.17.1

A. Their leaves produce more wax.

B. Their roots grow deeper into the soil.

C. They drop their leaves.

D. They photosynthesize more.

---

19. What is the largest object in the Solar System? SC.4.E.5.4

A. Earth

B. Jupiter

C. the Moon

D. the Sun

---

20. Jordan took a walk at sunset and noticed that the sky was cloudy. He looked at his outdoor thermometer and saw that it was 30°F and getting colder.

Based on the evidence Jordan saw, what form of precipitation would be most likely to fall during the night? SC.5.E.7.3

A. snow

B. rain

C. dew

D. fog

---

21. Inferences are _____. SC.5.N.1.1

A. never made by scientists.

B. exactly the same as observations.

C. questions that are made by studying conclusions or predictions.

D. conclusions or predictions that are made by studying observations.

---

22. Most plants produce flowers. Which of the following processes are flowers involved in? SC.5.L.14.2

A. food production

B. growth

C. protection

D. reproduction

---

23. Scientists often repeat experiments multiple times. Why is this important? SC.5.N.2.2

A. Repeating an experiment helps to verify the results.

B. Repeating an experiment gives scientists something to do while they think of new hypotheses.

C. Repeating an experiment turns a hypothesis into a theory.

D. Repeating an experiment allows scientists to test different variables.

---

24. Sounds are produced by the _____ of an object or a column of air. SC.5.P.10.1

A. evaporation

B. reflection

C. vibration

D. condensation

---

25. Which statement about stars is correct? SC.4.E.5.4

A. Stars can be different sizes.

B. Many stars are very close to the Earth.

C. All stars are the same distance from the Earth.

D. All stars have the same brightness.

---

26. The table below lists the weight of four blocks. SC.5.P.13.1

Weight of Blocks

Block Number	Weight of Block
1	1 kg
2	5 kg
3	10 kg
4	50 kg

The four blocks are each pushed with the same amount of force. Which block will move the fastest?

A. Block 4

B. Block 1

C. Block 3

D. Block 2

---

27. Sarah wants to know where in her garden chamomile would grow the best. She thinks chamomile will grow best in the corner of the garden that gets the most sunlight. To test her hypothesis, she decides to plant several groups of chamomile in her garden as an experiment. SC.5.N.1.1

Which of the following variables will Sarah need to measure to know which group of plants grew best?

A. the location of the plants

B. the type of plants

C. the amount of water she gives the plants

D. the height of the plants

---

28. Scientific inquiry attempts to search out, describe, explain, and predict things that happen in nature. Which of the following best describes how progress is made in scientific inquiry? SC.5.N.2.1

A. by asking questions and researching the answers in papers, books, and on the internet

B. by researching the history of science and learning about scientific progress in the past

C. by asking questions and collecting, analyzing, and interpreting data to answer them

D. by asking questions and collecting, analyzing, and interpreting different people's opinions

---

29. An electrical cord has interior wiring made of metal surrounded by an exterior jacket made of plastic or rubber. How do the wiring and jacket compare in their ability to conduct or insulate electricity? SC.5.P.10.4

A. Both the wiring and the jacket are insulators.

B. The wiring is an insulator, and the jacket is a conductor.

C. The wiring is a conductor, and the jacket is an insulator.

D. Both the wiring and the jacket are conductors.

---

30. Andrea is performing an experiment in which she needs to know when a strong acid is present. She is not sure which indicator to use, so she looks up the following table in her science textbook. SC.5.N.1.1

Indicator	**pH range**
thymol Blue	1.2 - 2.8
phenol Red	6.4 - 8.0
phenolphthalein	8.0 - 10.0
trinitrobenzoic acid	12.0 - 13.4

According to the textbook, which indicator should Andrea use?

Hint: Neutral substances have a pH of 7. Acids have a pH that is less than 7, and bases have a pH that is greater than 7.

A. phenolphthalein

B. phenol Red

C. trinitrobenzoic acid

D. thymol Blue

---

31. Sal is experimenting with materials that dissolve in water. He finds a material that dissolves well in water. Which of these could it be? SC.5.P.8.3

A. oil

B. salt

C. candle wax

D. butter

32.

The pictures above show a crocodile's mouth and a tree's roots. How are these structures similar? SC.5.L.14.2

A. They help the organism take in gases from the atmosphere.

B. They allow the organism take in nutrients.

C. They help to scare away predators.

D. They keep the organism from being blown away by wind.

---

33. Electrical energy can produce many other types of energy. When electricity runs through an electric stove, what other type of energy is produced? SC.5.P.10.4

A. sound energy

B. chemical energy

C. mechanical energy

D. heat energy

---

34. Roberta's next door neighbor has a theory that the best time to wash your car is late in the afternoon on Sunday. Is this a scientific theory? SC.5.N.2.1

A. Yes, the car will stay clean for more of the week.

B. Yes, the neighbor might be a scientist.

C. No, it is an opinion and is not testable.

D. No, it is better to wash cars on Saturday.

---

35. How is science different from other subjects that involve thought, such as art, philosophy, and religion? SC.5.N.2.1

A. Science is more subjective, since theories are based on opinions.

B. Science has a tendency to be heavily influenced by society.

C. Science requires more faith rather than logic and reason.

D. Science is more objective, since it is predominantly based on evidence.

---

36. Jorge is testing a mineral by seeing whether it can be scratched by a penny. What property of the mineral is Jorge testing? SC.4.E.6.2

A. color

B. streak

C. hardness

D. luster

---

37. Adaptations are important for the survival of both animals and plants. A plant such as the cactus has many adaptations that help it survive in its environment. A cactus' roots are long, but close to the surface of the ground, and they cover a large area. What is the possible advantage that this root system offers the cactus? SC.5.L.17.1

A. It makes getting water harder and slower for the cactus.

B. It makes the cactus look pretty.

C. It doesn't help the cactus at all.

D. It makes getting water easier and quicker for the cactus.

---

38. An object may move when a _____ is applied to it. SC.5.P.13.1

A. force

B. color

C. rule

D. name

---

39. The life cycle of a flowering plant and the life cycle of a conifer tree are shown below.

A comparison that can be made between these two life cycles is that ____. SC.4.L.16.4

A. conifers develop cones to reproduce, whereas flowering plants do not.

B. flowering plants grow from seeds, whereas conifers do not.

C. flowering plants grow from a seed into a seedling, whereas conifers do not.

D. conifers grow from a seed into a seedling, whereas flowering plants do not.

---

40. Jordan wants to conduct an experiment to see if plant food makes a difference in how well plants grow. He gets 10 pots and plants a different type of seed in each. He gives plant food to half of the plants and does not give plant food to the rest. He records the amount of plant food given to the plants. But, he decides not to write down the types of seeds he planted. Will someone else be able to repeat the experiment and find reliable results? SC.5.N.2.2

A. Yes, because the type of seed is not important. As long as some of the plants are receiving plant food and some are not, the experiment will give the same results.

B. No, because Jordan would need to use all vegetable seeds for the experiment to be reliable.

C. No, because Jordan should have used the same type of seeds in each pot, and should have recorded the type of seeds.

D. No, the results would not be reliable since not all of the plants were given plant food.

---

41. A species of plant lives in a warm, wet climate. Plants of this species have adaptations that help them survive in wet places. What will most likely happen to plants of this species if the environment where the plants live changes to become hot and dry? SC.5.L.17.1

A. Many plants of this species will grow larger.

B. Many plants of this species will grow faster.

C. The plants of this species will not be affected.

D. Many plants of this species will die out.

---

42. The picture below shows examples of water in its solid, liquid, and gas forms. SC.5.P.8.1

Which statement about the temperature of the different forms of water is true?

A. The steam must be cooler than the ice.

B. The ice must be cooler than the liquid water.

C. The ice must be warmer than the liquid water.

D. The liquid water must be warmer than the steam.

---

43. How are the seeds of a dandelion dispersed (spread)? SC.3.L.14.1

A. Burrs on the seeds get caught in animal fur.

B. Wind blows them.

C. Dandelions don't spread by seed; they spread only by roots called runners.

D. Ice carries them.

---

44. Mary thought that the number of frogs in the neighborhood pond had decreased over the last few years. So, she decided to count the number of frogs she saw around the pond twice each day for ten days. Mary's data is displayed in the table below. SC.5.N.1.1

Day	1	2	3	4	5	6	7	8	9	10
# Frogs at 12 PM	3	2	1	0	1	0	3	2	0	2
# Frogs at 7 PM	15	21	22	13	19	15	20	17	23	18

Based on her observations, which of the following can Mary infer?

A. The number of frogs at the pond has steadily increased over the last 2 years.

B. Frogs are consumed by predators in the morning and are reborn in the evening.

C. Frogs rest during the afternoon and become more active in the evening.

D. The number of frogs at the pond has steadily declined over the last 2 years.

---

45. Many landforms are created through the processes of weathering and erosion. Which statement correctly compares weathering and erosion? SC.4.E.6.4

A. Weathering can help erosion happen faster by breaking up rocks.

B. Weathering and erosion are two names for the same process.

C. Erosion can make weathering happen slower by breaking up rocks.

D. Weathering and erosion must always take place at the same time.

---

46. The inner four planets are small and made mostly of rock, while the outer four planets are large and made mostly of _____. SC.5.E.5.3

A. rock

B. gas

C. water

D. nothing

---

47. Which of the following is a physical change that might occur because of a decrease in temperature? SC.5.P.8.1

A. Eggs are cooked and become solid.

B. Solid butter melts into a liquid.

C. Fallen leaves decay faster.

D. Water vapor condenses into liquid water.

---

48. Water in the atmosphere is a gas. When the air cools, water may condense into clouds. Then it may become a liquid or a solid and fall back to the surface of the Earth. SC.5.E.7.3

Water that falls from clouds is called

A. precipitation.

B. groundwater.

C. the water cycle.

D. evaporation.

---

49. Zahra noticed a large weed in her mother's vegetable garden. She grabbed it with both hands. What kind of force will Zahra use to remove the weed from the garden? SC.5.P.13.1

A. a pulling force

B. a pushing force

C. Nothing she does will remove the weed.

D. both a pushing force and a pulling force

---

50. **Sunlight Grass Ant Lizard Snake**

Which of the following is a **producer** in the food chain shown above? SC.4.L.17.3

A. ant

B. lizard

C. grass

D. sunlight

51.

Average Yearly Temperature of World Cities

Location	Average Yearly Temperature	Latitude
Bangkok, Thailand	30.4°C	13°N
Cairo, Egypt	22.0°C	30°N
Berlin, Germany	9.6°C	52°N
Reykjavik, Iceland	5.0°C	64°N

The average yearly temperatures and latitudes of four cities are shown in the table above. This table shows that average yearly temperature usually _____ as latitude increases. SC.5.E.7.3

A. does not change

B. increases

C. changes randomly

D. decreases

---

52. When things are dropped or thrown, they fall to Earth because of gravity. What kind of force does gravity have on things? SC.5.P.13.1

A. Gravity is not a force.

B. both a pulling force and a pushing force

C. a pushing force

D. a pulling force

53.

Which flower part becomes the hard coating around the seed? SC.3.L.14.1

A. ovule

B. pistil

C. sepal

D. stamen

---

54. If an object is not in a container, but you can measure the length, width, and depth of the object with a ruler, then what **state** of matter is it in? SC.5.P.8.1

A. gas

B. liquid

C. solid

D. magnetic

---

55. Which of the following can a galaxy include? SC.4.E.5.4

A. stars

B. moons

C. dust

D. all of these

Answers

1. D
2. D
3. D
4. C
5. A
6. A
7. C
8. A
9. A
10. D
11. A
12. D
13. B
14. D
15. A
16. B
17. C
18. C
19. D
20. A
21. D
22. D
23. A
24. C
25. A
26. B
27. D
28. C
29. C
30. D
31. B
32. B
33. D
34. C
35. D
36. C
37. D
38. A
39. A
40. C
41. D
42. B
43. B
44. C
45. A
46. B
47. D
48. A
49. A
50. C
51. D
52. D
53. A
54. C
55. D