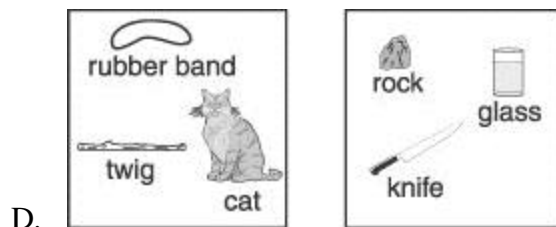
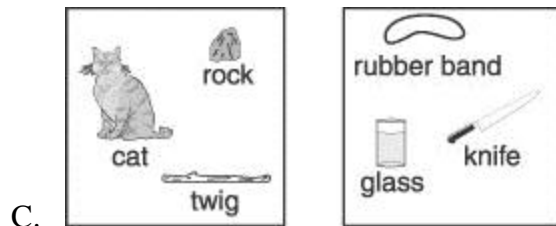
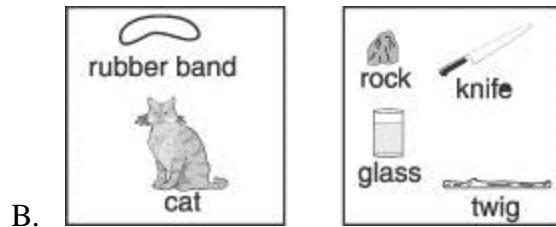
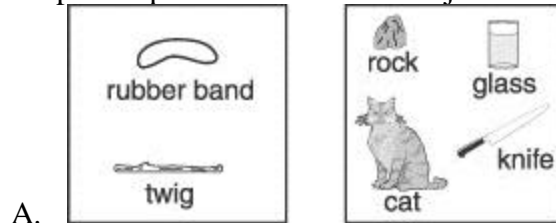


Name: _____

Date: _____

FOURTH GRADE-SCIENCE (SCIENCE4_3)

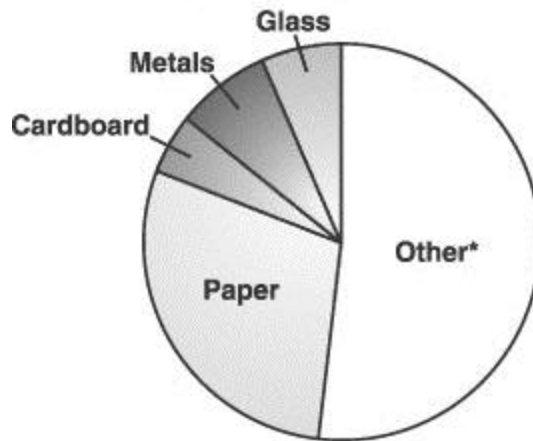
1. Which pair of pictures below sorts objects into natural and man-made things?



2.

Use the pie graph below to answer this question.

**Composition (by weight) of
Average Sanitary Landfill**

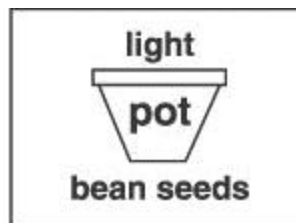


* Includes yard waste, wood, demolition debris, plastics, and miscellaneous wastes.

Based on the graph, slightly more than one-fourth of the trash in a landfill is

- A. paper.
- B. cardboard.
- C. metals and glass.
- D. other wastes.

3. Tom wanted to find out whether plants can grow better in the dark or in the light. He put a pot with six radish seeds in a dark room and a pot with six bean seeds on the windowsill.



He added the same amount of water to both pots. The bean seeds grew better than the radish seeds, so Tom said his plants grew best in the light. To be able to say this he should have

- A. used more seeds in each pot.
- B. watered the radish seeds more.
- C. put the same kind of seeds in both pots.
- D. grown the radish seeds in light instead of dark.

4. If more water evaporates from the ocean,

- A. more water vapor will be in the atmosphere.
 - B. the ocean temperature will go up.
 - C. the air temperature will go down.
 - D. more water will flow into streams and lakes.
-

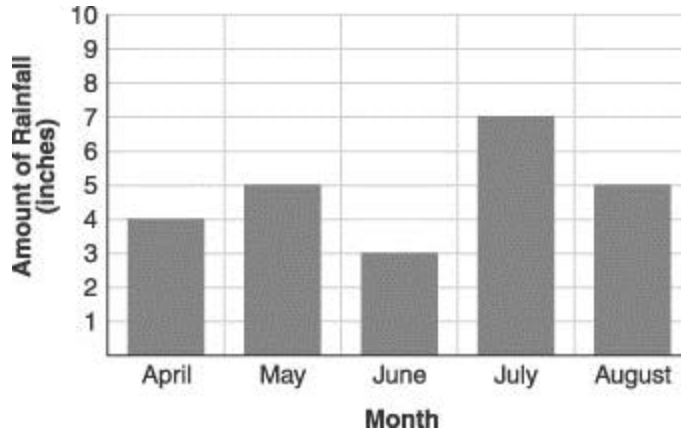
5. Dan thinks the boys in his school are taller, on the average, than the girls. Rose thinks the girls are taller. Which would be the SUREST way to find out who is right?
- A. asking a teacher who knows all the students in school
 - B. looking up the average height of people of various ages in the encyclopedia
 - C. measuring the height of all the boys and girls in school
 - D. looking at the school records which tell how tall the students were when they entered school
-

- 6.
- Use the chart below to answer this question.*

Month	Average Temperature
July	79°
August	74°
September	65°
October	58°
November	?

- According to this chart, the average temperature in November would most likely be
- A. lower than in October.
 - B. the same as in September.
 - C. the same as in October.
 - D. higher than in September.
-

- 7.
- Use the bar graph below to answer this question.*



The bar graph shows the amount of rainfall for each month from April through August. In which two months was the rainfall the same?

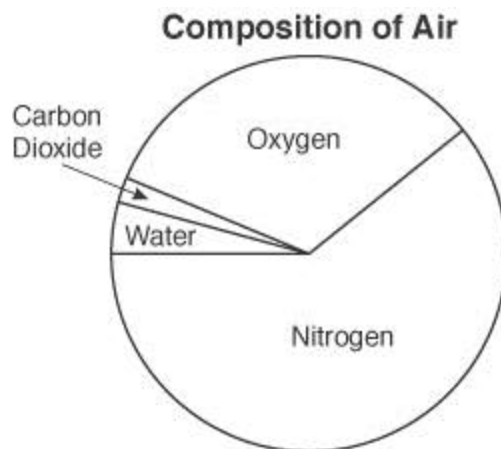
- A. April and June
- B. May and August
- C. June and July
- D. April and August

8. Which instrument would be MOST useful for finding out how fast water evaporates in a pan?

- A. clock
- B. balance scale
- C. barometer
- D. hot plate

9.

Use the pie graph below to answer this question.



Air is mostly

- A. water.
- B. carbon dioxide.
- C. oxygen.
- D. nitrogen.

10. Ms. Rely's class is doing an experiment outside with ice cubes and colored paper. The ice cube will melt fastest on

- A. red paper.
- B. green paper.
- C. white paper.
- D. black paper.

11. Rebecca and Johanna wanted to see if a hermit crab's size affected its speed. They timed how long it took each of four crabs to travel down a track and across the finish line. The table shows the data from their investigation.

Length of Crab	Time Elapsed
2 cm	1 min., 30 sec.
3 cm	45 sec.
4 cm	2 min., 15 sec.
5 cm	1 min., 45 sec.

In the investigation, the dependent (responding) variable being tested was

- A. the length of the track.
- B. the length of the crabs.
- C. the time it took to walk the track.
- D. the age of the crabs.

12. A class is conducting an experiment to see what color of paper will absorb the most light as heat energy. During the experiment, the variable that the class should change is the

- A. distance the light is from the paper.
- B. time the light is left on the paper.
- C. size of the sheet of paper.
- D. color of the paper.

13.

Use the table below to answer this question.

Solar System Chart

Planet	Average Distance From the Sun (in millions of km)	Period of Revolution (in Earth years)	Number of Known Moons
Mercury	58	0.24	0
Venus	108	0.62	0
Earth	150	1.00	1
Mars	228	1.88	2
Jupiter	778	11.86	16
Saturn	1,429	29.46	18
Uranus	2,875	84.01	15
Neptune	4,504	164.79	8
Pluto	5,900	248.60	1

Which conclusion can be made from the table?

- A. All planets have moons.
- B. Each planet is about 50 million kilometers farther from the Sun than the next closest planet.
- C. The largest planet is furthest from the Sun.
- D. The period of revolution increases with greater distance from the Sun.

14. Two containers were filled with cold water and then put in the sun. The water temperature was recorded every five minutes. The results are shown in the table below.

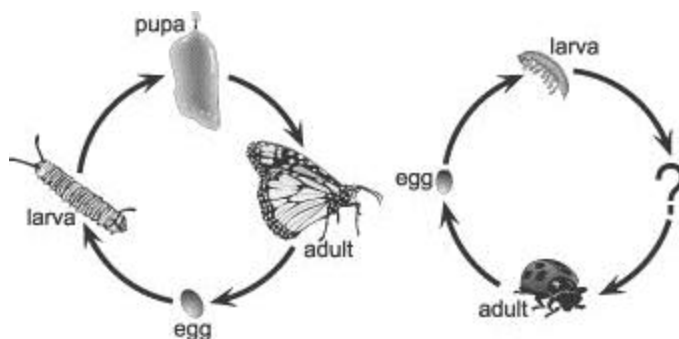
TEMPERATURE OF WATER (°C)				
Container	5 minutes	10 minutes	15 minutes	20 minutes
A	2°C	4°C	6°C	8°C
B	5°C	7°C	9°C	11°C

Which is MOST LIKELY the temperature of the water in container A after 25 minutes in the sun?

- A. 8° C
- B. 10° C
- C. 16° C
- D. 20° C

15.

Use the diagrams below to answer this question.



The life cycles of a butterfly and a ladybug are similar. The diagrams show the life cycle of each. Which stage of the ladybug's life cycle is missing?

- A. egg
- B. larva
- C. pupa
- D. adult

16. Susan wanted to see which brand of paper towel was the strongest. She bought 4 different brands, and used sheets of the same size for her experiment. She dampened each sheet, squeezing out any excess water. For each trial, Susan got a friend to hold the edges of a damp sheet while she counted how many pennies it would hold before tearing.

What is the variable in this experiment?

- A. the amount of water she put on each sheet
- B. the cost of each brand
- C. the different brands of paper towel
- D. the size of each sheet

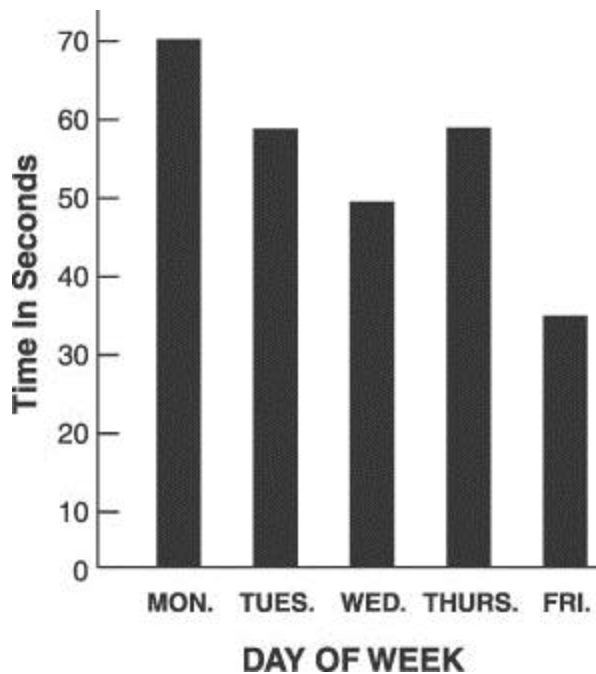
17. A fourth-grade class studied the heights of class members. They made the following chart.

Name	Height
James	4 ft. 3 in.
Ann	4 ft. 7 in.
Carl	4 ft. 8 in.
Lee	4 ft. 2 in.
Sue	4 ft. 9 in.
Joseph	4 ft. 5 in.
Mario	4 ft. 4 in.
Ruth	4 ft. 10 in.

How many of the students were taller than 4 feet 6 inches?

- A. 3 students
- B. 4 students
- C. 5 students
- D. 6 students

18. The graph below shows the time it took a racehorse to run around a track each day.

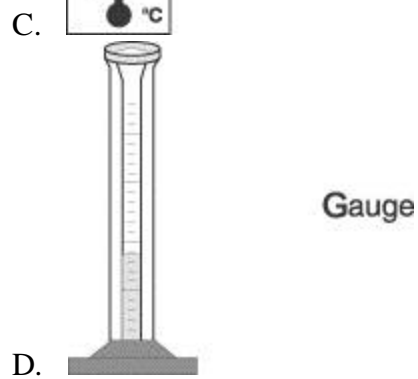
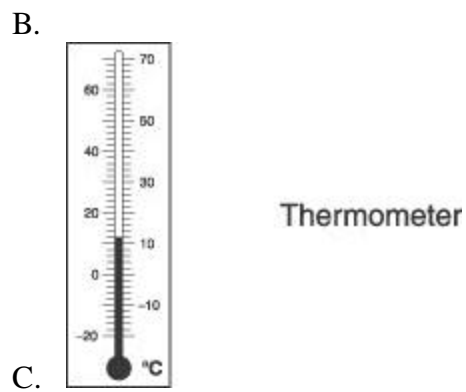
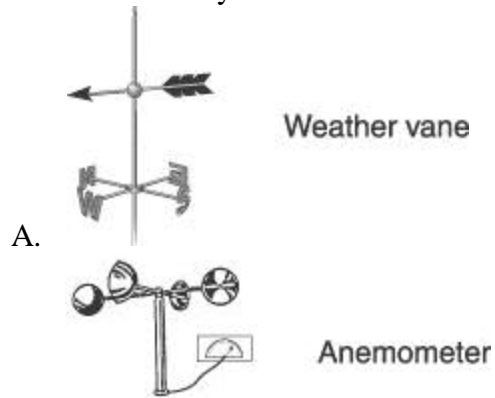


About how many seconds did it take the horse to run around the track on Tuesday?

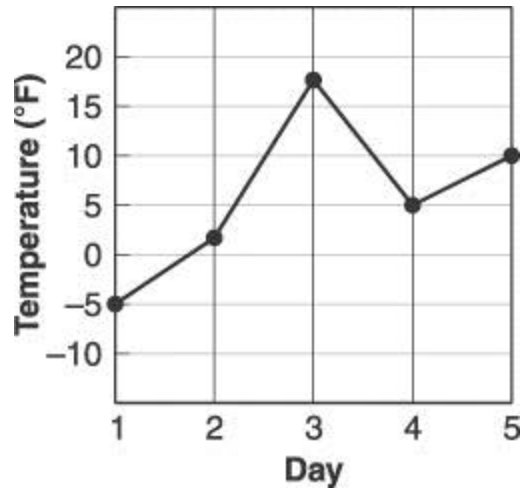
- A. 40 seconds
- B. 50 seconds

- C. 60 seconds
- D. 70 seconds

19. Which tool would you use to measure the amount of rain that falls in an area?



20.
Use the graph below to answer this question.



Jack was studying changes in the weather. He wrote down the temperature at 12:00 noon for five days in January. On which two days were the temperatures closest to each other?

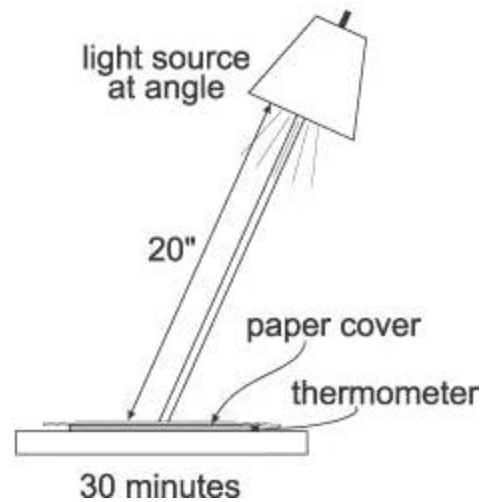
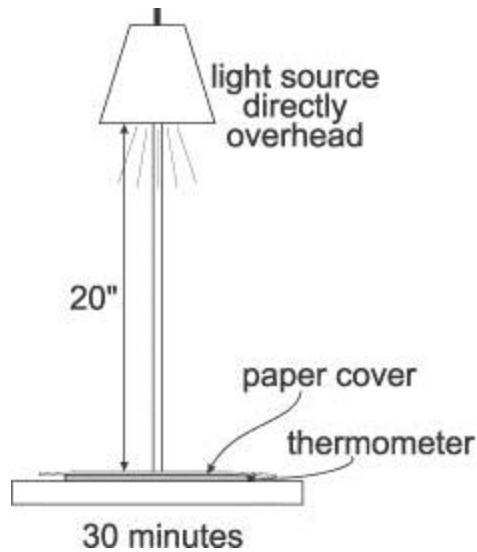
- A. Days 1 and 2
- B. Days 2 and 4
- C. Days 4 and 5
- D. Days 3 and 5

21. What is the best tool to use for measuring the height of a schoolmate?

- A. graduated cylinder
- B. balance
- C. tape measure
- D. thermometer

22.

Use the pictures below to answer this question.



Lola is studying how the angle of the Sun affects the temperature of Earth's surface. What changes in Lola's experiment?

- A. the position of the light
- B. the brightness of the light
- C. the light's distance
- D. the time the light is on

23.

Use the table below to answer this question.

Planet	Diameter (km)
Earth	12,756
Mars	6,787
Saturn	120,660
Neptune	49,560

The table lists the diameters of four of the planets. Which planet is the LARGEST?

- A. Earth
- B. Mars
- C. Saturn
- D. Neptune

24. Cady was doing an experiment with her two bantam red chickens for a 4-H project. The data she gathered is in the chart below.

Week Number	Chicken #1		Chicken #2	
	Amt. of Oats	Chicken Weight	Amt. of Barley	Chicken Weight
1	2.5 kg	3.4 kg	2.5 kg	3.4 kg
2	2.5 kg	3.4 kg	2.5 kg	3.4 kg
3	2.5 kg	3.4 kg	2.5 kg	3.6 kg
4	2.5 kg	3.5 kg	2.5 kg	3.7 kg
5	2.5 kg	3.5 kg	2.5 kg	3.8 kg
6	2.5 kg	3.5 kg	2.5 kg	3.9 kg

What was Cady trying to learn by doing this experiment?

- A. which food the chickens like better
- B. how much weight the chickens gained in six weeks
- C. the best time of day to feed chickens
- D. which food helps the chickens to gain weight faster

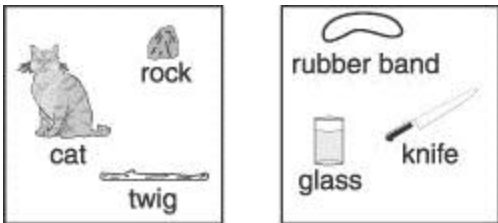
25. A scientist has developed a material that conducts electricity with less heat loss than copper wiring. Information about this recent discovery would MOST LIKELY be found

- A. in an encyclopedia.
- B. on a home-repair television show.
- C. in a science textbook.
- D. in a science reference magazine.

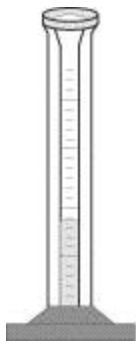
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FOURTH GRADE-SCIENCE(SCIENCE4_3)

(Answer Key)

1. 
2. paper.
3. put the same kind of seeds in both pots.
4. more water vapor will be in the atmosphere.

5. measuring the height of all the boys and girls in school
6. lower than in October.
7. May and August
8. clock
9. nitrogen.
10. black paper.
11. the time it took to walk the track.
12. color of the paper.
13. The period of revolution increases with greater distance from the Sun.
14. 10°C
15. pupa
16. the different brands of paper towel
17. 4 students
18. 60 seconds
- 19.



Gauge

20. Days 2 and 4
21. tape measure
22. the position of the light
23. Saturn
24. which food helps the chickens to gain weight faster
25. in a science reference magazine.