

Rebecca has samples of different types of metal, and she wants to find the density of each. First, she measures the volume of each sample. Now she needs to measure the samples' masses.

Which of the following tools should Rebecca use to measure the mass of each sample?

- A. measuring tape
- B. calipers
- C. graduated cylinder
- D. balance

Question 2

Add

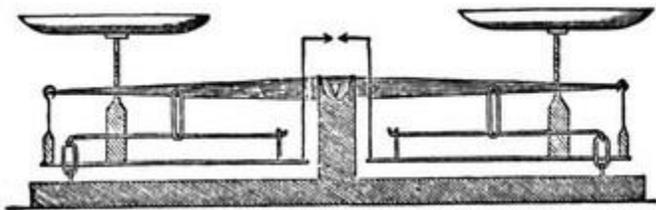
Ken needs to measure out 50 mL of water. Which of the following is the best tool for Ken to use?

- A. balance
- B. ruler
- C. spring scale
- D. graduated cylinder

Question 3

Add

Emily sees the following tool in her science lab.



What is this tool used to measure?

- A. an object's volume
- B. an object's density
- C. an object's mass
- D. an object's length

Question 4

Add

Tamora is heating a liquid to find the temperature at which the liquid boils.



Which piece of laboratory equipment should Tamora use to measure the temperature of the liquid once the boiling has begun?

- A. timer
- B. balance
- C. microscope
- D. thermometer

Question 5

Add

Which of the following laboratory tools would be most appropriate for measuring the approximate volume of a liquid?

- A. thermometer
- B. beaker
- C. balance
- D. tweezers

Question 6

Add

Directions: Select the correct answer from each drop-down menu.

Mass can be measured using a volume can be measured using a and length can be measured using a

Question 7

Add

Betty is studying vein patterns in leaves. Which of the following tools could help Betty examine the leaves' veins in greater detail?

- A. a hygrometer
- B. a graphing calculator
- C. a compass
- D. a hand lens

Question 8

Add

Which of the following could be used to measure time in a scientific investigation?

- A. a meter stick
- B. a stopwatch
- C. a thermometer
- D. a spring scale

Question 9

Add

Which of the following would be the best tool for looking at cells in a scientific investigation?

- A. a pH meter
- B. a hand lens
- C. a telescope
- D. a microscope

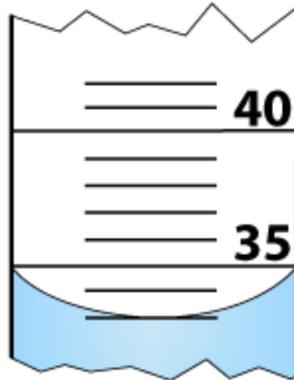
Question 10

Instances

1

Add

As a part of a laboratory investigation, Emily measured the volume of water in a graduated cylinder. Which of the choices correctly identifies the volume of water in the graduated cylinder?



- A. 33 mL
- B. 33.5 mL
- C. 35 mL
- D. 34 mL

Question 11

Instances

1

Add

Robert was not sure how to read a metric ruler, so he asked his lab partner Luis for some help.

What is the length of the line above the ruler?



- A. 1 cm

- B. 2 cm
- C. 2.5 cm
- D. 3 cm

Question 12

Instances

1	<input type="text"/>	▼
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Add

Colin wants to know the length of a pencil. He measures it with a metric ruler that is shown in the picture below.

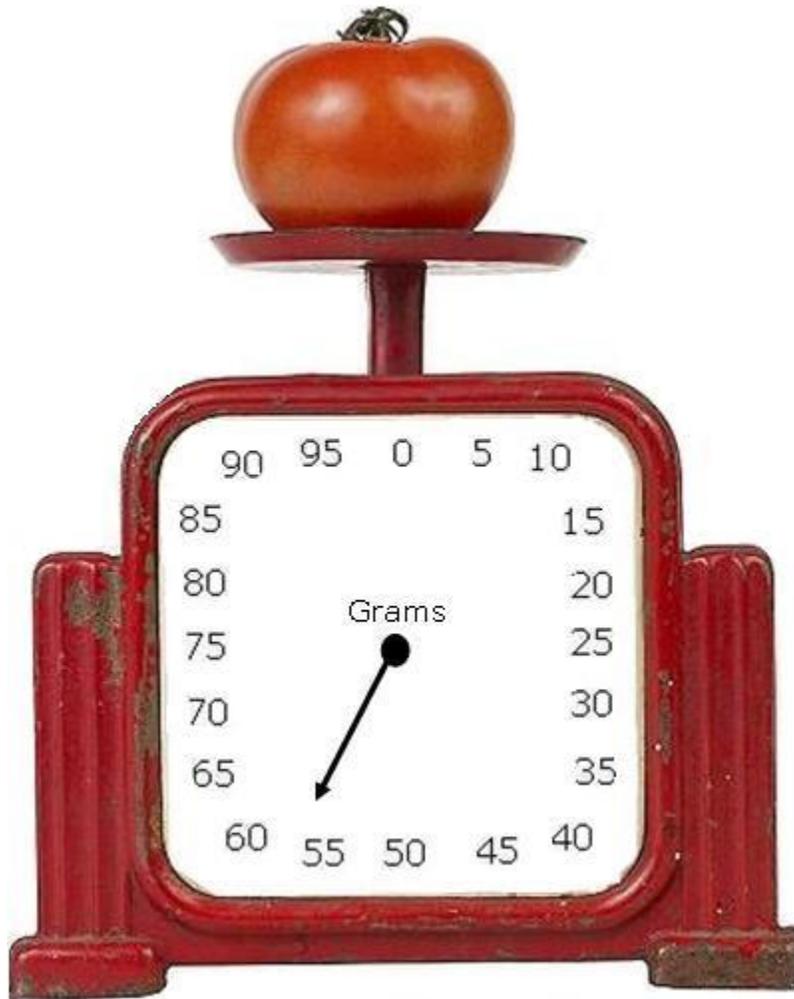


What is the length of Colin's pencil?

- A. 10.5 cm
- B. 11 cm
- C. 10 cm
- D. 11.5 cm

Question 13

Add



The picture above shows a scale being used to measure the mass of a tomato. How much mass does the tomato have?

- A. 67 g
- B. 62 g
- C. 57 g
- D. 52 g

Question 14

Add

Directions: Select the correct image.

Mattie has four rocks. One of them contains a rare mineral, and she'd like to know which rock it is. Her lab partner calculates that, based on the known density of the rare mineral and the volume of each rock, the rock containing the rare mineral should have a mass of about 700 g. Mattie places each rock on an electronic balance.

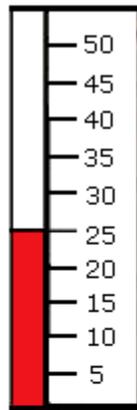
Which of Mattie's rocks most likely contains the rare mineral?

Question 15

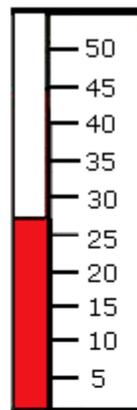
Instances

Add

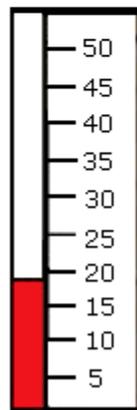
The temperature outside is 25°C. Which of the following thermometers shows that the temperature is 25°C?



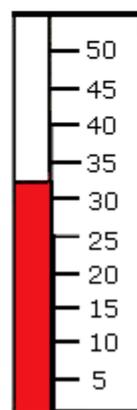
W



X



Y



Z

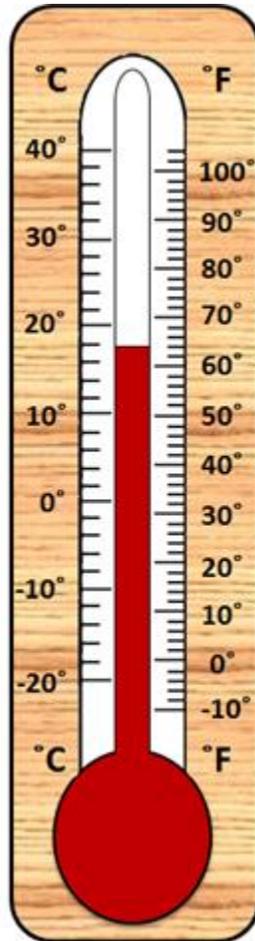
- A. X
- B. Z

- C. W
- D. Y

Question 16

Add

Directions: Type your answer in the box. Use numerals, not words.



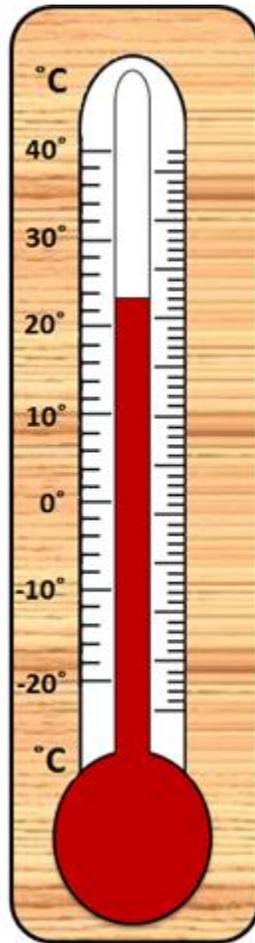
What temperature does the thermometer show to the nearest tenth of a degree Celsius?

 °C

Question 17

Add

Directions: Type your answer in the box. Use numerals, not words



The thermometer above measures in degrees Celsius. What temperature does the thermometer show to the nearest tenth of a degree?

 °C

Question 18

Instances

Add

Abby timed how long she ran using a stopwatch. She started the timer when she started running and stopped it when she had finished running. The stopwatch is shown below after Abby stopped it.



How long did Abby run?

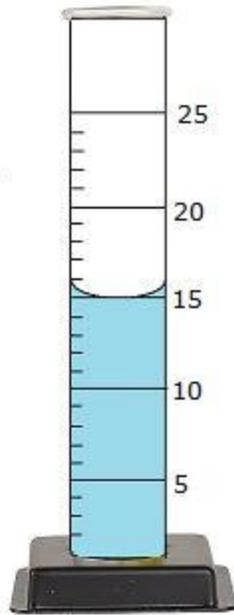
- A. 59 sec
- B. 57 sec
- C. 51 sec
- D. 54 sec

Question 19

Add

Directions: Type your answer in the box. Use numerals, not words.

Kaylee wants to measure the volume of water that she has left over from an experiment. She pours the water into a graduated cylinder. She reads the graduated cylinder shown below.

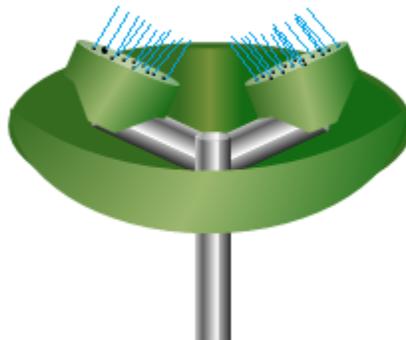


Rounding to the nearest tenth of a milliliter, what is the water's volume?

mL

Question 20

Add



The lab equipment shown in the picture above is designed to shoot water upward from its two sprayers. What is this equipment used for?

- A. showing how water behaves
- B. washing chemicals out of the eyes
- C. getting a drink in lab
- D. making the lab more relaxing

Question 21

Add



During which of these lab activities would it be most important to wear gloves?

- A. testing the pH of different acids and bases
- B. placing a thermometer into beaker of water
- C. drawing a picture of the results of an investigation
- D. filling beakers with water at the sink

Question 22

Add

In which of these situations should a fire blanket be used?

- A. A student tips over their Bunsen burner.
- B. Smoke in the lab sets off the fire alarm.
- C. A student's hair catches on fire.
- D. A hot match starts a fire in the trash can.

Question 23

Add

In which of these situations should a fire extinguisher be used?

- A. A student tips over their Bunsen burner.
- B. Smoke in the lab sets off the fire alarm.
- C. A hot match starts a fire in the trash can.
- D. A student's hair catches on fire.

Question 24

Add

While preparing a sample for an experiment, Gomer accidentally cuts his hand with a scalpel. Mick, his lab partner, immediately runs to get the teacher's attention. What should Gomer do to stop his hand from bleeding?

- A. Press a clean towel or cloth firmly against the cut.
- B. Lie down and raise his arm straight up.
- C. Wash the cut with any liquid that is nearby.
- D. Nothing, let the blood coagulate and stop itself.

Question 25

Add

When dissolving a metal in sulfuric acid, hydrogen, a highly flammable gas, is given off. You are dissolving equal amounts of different metals to compare the volume of hydrogen gas produced. For safety purposes, your teacher tells you to wear an apron, gloves, and goggles. Which of the following safety procedures would also be needed?

- A. Avoid sparks or open flames.
- B. Work away from direct sunlight.
- C. Wear a gas mask.
- D. Use stainless steel containers only.

Question 26

Add

Your lab instructor has given you an unknown compound in a test tube. As the first step in the identification of this unknown, you are told that it is safe to test the compound for odor. Which of the following describes the appropriate way to determine whether the unknown compound has an odor?

- A. Pour some of the unknown on a paper towel and sniff the paper towel.
- B. Pour some of the unknown into a dish and inhale directly from the dish.
- C. Wave your hands to direct some of the odor toward your nose.
- D. Inhale directly above the opening of the test tube.

Question 27

Add

Erika was using a glass beaker during a science experiment. During the experiment, the bottom of the beaker cracked but did not break completely. What should Erika do?

- A. Continue with the experiment, using the beaker as it is.
- B. Put the beaker in the broken-glass bin and get another one.
- C. Tape the cracked area and continue using the beaker as it is.
- D. Trade beakers with another group that is not using its beaker.

Question 28

Add

Arturo was mixing chemicals in the science lab when some of the chemicals accidentally splashed up into his eyes. What should Arturo do?

- A. Put contact lenses in.
- B. Flush his eyes with running water for at least 15 minutes.
- C. Look directly into the sun.
- D. Put his safety goggles on.

Question 29

Add

Eileen is heating a solution in a test tube. What safety precaution should she take?

- A. Heat the test tube on an open flame if possible.
- B. Wear latex gloves.
- C. Put a tight lid on the test tube.