

## Measurement and Numbers

### Activity 1: Matching Pairs

#### Question Group 1

##### Question 1

This activity presents learners with 8 different statements that must be matched by meaning. Learners tap on the statements to select them and then tap on the Check Match button. The order of the statements is randomized. A mis-matched pair restarts the *game* and re-randomizes the order of the statements. The statements are ...

Unit of Time

Unit of Volume

Unit of Mass

g

s

Unit of Length

m

mL

#### Question Group 2

##### Question 2

This activity presents learners with 8 different statements that must be matched by meaning. Learners tap on the statements to select them and then tap on the Check Match button. The order of the statements is randomized. A mis-matched pair restarts the *game* and re-randomizes the order of the statements. The statements are ...

cm<sup>2</sup>

cm

Unit of Length

Unit of Area

cm<sup>3</sup>

Unit of Mass

Unit of Volume

mg

## Activity 2: Scientific Notation

### Question Group 3

#### Question 3

The following number is written in *standard notation*. Express this amount using scientific notation.

43200

#### Question 4

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

68500

#### Question 5

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

32900

### Question Group 4

#### Question 6

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

0.000215

#### Question 7

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

0.000792

**Question 8**

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

0.000645

**Question Group 5****Question 9**

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

0.00228

**Question 10**

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

0.00317

**Question 11**

The following number is written in *standard notation*. Express this amount using scientific notation. Tap to identify the proper location of the decimal point and tap to identify the power on 10.

0.00962

**Question Group 6****Question 12**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$4.5 \times 10^{-4}$

**Question 13**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$2.3 \times 10^{-4}$$

**Question 14**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$8.5 \times 10^{-4}$$

**Question Group 7****Question 15**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$7.52 \times 10^{-3}$$

**Question 16**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$6.18 \times 10^{-3}$$

**Question 17**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$3.71 \times 10^{-3}$$

**Question Group 8****Question 18**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$8.4 \times 10^4$$

**Question 19**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$2.9 \times 10^4$$

**Question 20**

The following number is written in *scientific notation*. Express this amount using standard notation. Tap to identify the proper location of the decimal point.

$$6.8 \times 10^4$$

### Activity 3: Measurement

#### Question Group 9

##### Question 21

A Chemistry student is measuring the volume of water using a graduated cylinder. A picture of the water level in the cylinder is shown. What is the proper means of reporting the measurement of the volume of water?

- 12 mL
- 12.5 mL
- 12.6 mL
- 12.60 mL
- 13 mL
- 13.0 mL



##### Question 22

A Chemistry student is measuring the volume of water using a graduated cylinder. A picture of the water level in the cylinder is shown. What is the proper means of reporting the measurement of the volume of water?

- 25 mL
- 25.5 mL
- 25.6 mL
- 25.60 mL
- 26 mL
- 26.0 mL

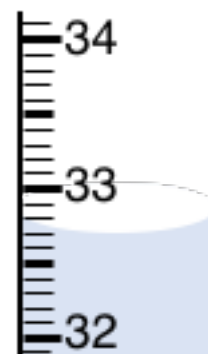


#### Question Group 10

##### Question 23

A Chemistry student is measuring the volume of water using a graduated cylinder. A picture of the water level in the cylinder is shown. What is the proper means of reporting the measurement of the volume of water?

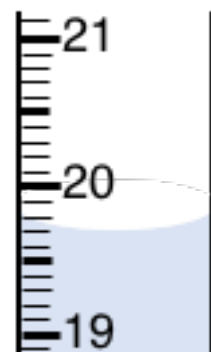
- 32 mL
- 32.5 mL
- 32.7 mL
- 32.70 mL
- 33 mL
- 33.0 mL



**Question 24**

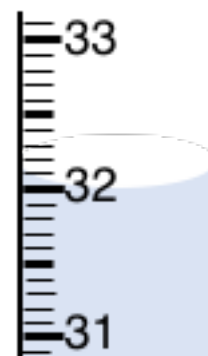
A Chemistry student is measuring the volume of water using a graduated cylinder. A picture of the water level in the cylinder is shown. What is the proper means of reporting the measurement of the volume of water?

- 19 mL
- 19.5 mL
- 19.7 mL
- 19.70 mL
- 20 mL
- 20.0 mL

**Question Group 11****Question 25**

A Chemistry student is measuring the volume of water using a graduated cylinder. A picture of the water level in the cylinder is shown. What is the proper means of reporting the measurement of the volume of water?

- 30 mL
- 31 mL
- 32 mL
- 32.0 mL
- 32.00 mL
- 33 mL

**Question 26**

A Chemistry student is measuring the volume of water using a graduated cylinder. A picture of the water level in the cylinder is shown. What is the proper means of reporting the measurement of the volume of water?

- 40 mL
- 42 mL
- 43 mL
- 43.0 mL
- 43.00 mL
- 44 mL



## Question Group 12

### Question 27

Kara Fulreading is measuring the length of a copper wire using a centimeter ruler. She carefully places one end of the copper wire at the 0.00-cm mark and aligns the rest of the wire parallel to the ruler. The opposite end of the wire is shown. What is the proper means of reporting the measurement of the length of the copper wire?



- 15 cm
- 15.0 cm
- 15.4 cm
- 15.42 cm
- 16 cm
- 16.0 cm

### Question 28

Kara Fulreading is measuring the length of a copper wire using a centimeter ruler. She carefully places one end of the copper wire at the 0.00-cm mark and aligns the rest of the wire parallel to the ruler. The opposite end of the wire is shown. What is the proper means of reporting the measurement of the length of the copper wire?



- 11 cm
- 11.0 cm
- 11.8 cm
- 11.85 cm
- 12 cm
- 12.0 cm



### Question Group 13

#### Question 29

Kara Fulreading is measuring the length of a copper wire using a centimeter ruler. She carefully places one end of the copper wire at the 0.00-cm mark and aligns the rest of the wire parallel to the ruler. The opposite end of the wire is shown. What is the proper means of reporting the measurement of the length of the copper wire?



- 18 cm
- 18.0 cm
- 18.3 cm
- 18.35 cm
- 19 cm
- 19.0 cm

#### Question 30

Kara Fulreading is measuring the length of a copper wire using a centimeter ruler. She carefully places one end of the copper wire at the 0.00-cm mark and aligns the rest of the wire parallel to the ruler. The opposite end of the wire is shown. What is the proper means of reporting the measurement of the length of the copper wire?



- 19 cm
- 19.1 cm
- 19.15 cm
- 19.2 cm
- 20 cm
- 20.0 cm

### Question Group 14

#### Question 31

Kara Fulreading is measuring the length of a copper wire using a centimeter ruler. She carefully places one end of the copper wire at the 0.00-cm mark and aligns the rest of the wire parallel to the ruler. The opposite end of the wire is shown. What is the proper means of reporting the measurement of the length of the copper wire?



- 20 cm
- 20.0 cm
- 20.5 cm
- 20.50 cm
- 21 cm
- 21.0 cm

#### Question 32

Kara Fulreading is measuring the length of a copper wire using a centimeter ruler. She carefully places one end of the copper wire at the 0.00-cm mark and aligns the rest of the wire parallel to the ruler. The opposite end of the wire is shown. What is the proper means of reporting the measurement of the length of the copper wire?



- 14 cm
- 14.0 cm
- 14.4 cm
- 14.40 cm
- 15 cm
- 15.0 cm

