1.2 Measurements and scientific tools

Name:

Worksheet

Learning objectives:

- Distinguish between quantitative and qualitative measurement
- Distinguishes between accuracy and precision
- Concludes Why should you use significant digits
- Define some scientific tools used by scientists
- Investigates some scientific tools used by Life Scientists

Fill in the blanks.

1. There are 5 birds on the tree is a _____ measurement while the birds are brown in color is a _____ measurement.
2. The length of the book is 18 cm. Here, cm is the _____ and is the unit of _____.
3. **Fill the table.**

Quantity measured	Unit
Length	
Mass	
Time	
Temperature	
Intensity of light	
Electric current	
Amount of substance	

4. Watch the video below and answer question 5.

5. Convert the following

a) 50cm =_____ m

b) 0.235 m= _____mm

c) 75.25 L =_____ kL

d) 0.8942 kg = _____g

6. _____ explains how close a measurement is to its true value while _____ explains how close a measurement is to the other measurements taken in the same way.

7. **Choose the correct explanation for the following images.**

8. **Watch the video below on the rules of significant figures and answer question 9**

9. How many significant figures are there in the following numbers?

a) 5.033-

b) 0.009-

c) 200000-

d) 200.00-

e) 53-

f) 9.005-

g) 90.0410-

10. Match the images to the names of the tools and uses.

Image	Name of the tool	Uses
	Science journal	Used for researching information and analyzing data
	Graduated cylinder	Used to record notes
	Thermometer	To measure length
	Computer	To measure liquids
	Meter scale	To measure temperature
	Microscope	Measures force
	Spring balance	To observe microscopic organisms
	Balance	Measure mass