

Unit 1.1 What is a machine?

1. Match.

Work

Simple machines

Complex machines

1) have just one or two parts.

2) means the use of a force to move an object across a distance.

3) are made up of simple machines that work together.

2. Fill in the gaps.

pulley

wheel and axle

inclined plane

wedge

lever

screw

- 1) _____ is made of a round object, a wheel, attached to a post called an axle.
- 2) _____ is made from two slanted sides that end in a sharp edge.
- 3) _____ is a stiff bar that rests on a support.
- 4) _____, or a ramp, is a slanted surface.
- 5) _____ can make work easier in two ways. It can decrease the amount of force needed to move an object. It can also change the direction that the force is applied.
- 6) _____ is an inclined plane wrapped around a center post.

3. Draw a line from each simple machine to its correct part on the bicycle.

- A) lever
- B) pulley
- C) wheel and axle



4. Make a list of three complex machines.

1) _____ 2) _____

Unit 1.2 What is the design process?

5. Fill in the gaps.

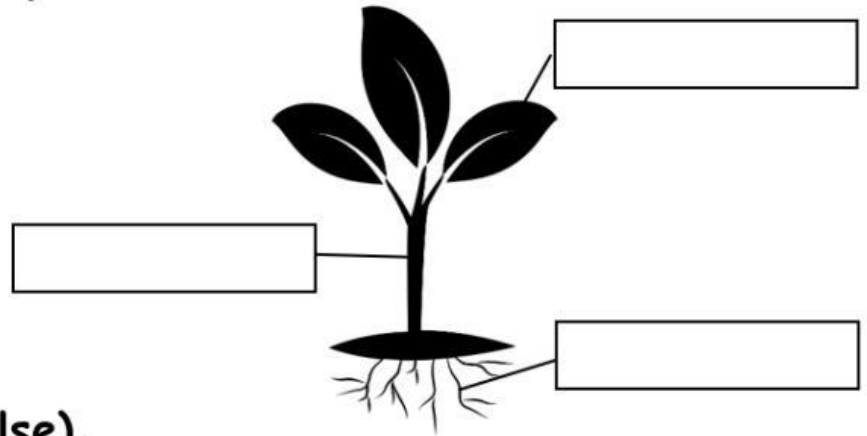
research	design process	results
prototype	evaluate	redesign
		engineer

- 1) The _____ is a step-by-step method used to solve a problem.
- 2) An _____ is any person who designs new technologies.
- 3) To _____ means to look for facts about something.
- 4) A _____ is the first working product that uses a design.
- 5) _____ means to find out how well something works.
- 6) To _____ means to make a prototype better.
- 7) Engineers communicate _____ about their tests to people working with them.

Unit 2.1 How do plants use stems and roots to grow?

6. Label the parts of the plant.

- Leaf
- Roots
- Stem



7. Circle T(True) or F(False).

- 1) Pumpkin stems grow under the ground.
- 2) Stems support the roots of plants.
- 3) Roots move water to the leaves.

T F

T F

T F

8. Write the names of the two types of roots.

1) _____ 2) _____

9. Fill in the gaps:

leaves

nutrient

roots and stems

ground

1) Plants need _____ to take in and move materials plants need to live and grow.

2) The root system of a plant is often below the _____.

3) Roots store food made by the plant's _____.

4) A _____ is any material needed by living things for energy, growth, and repair.

10. Match the columns.

- a) Cactuses and potatoes
- b) Cactus stems
- c) Potatoes
- d) Potato's "eyes"

become new plants.
grow below the ground.
have different types of stems.
grow above the ground.



11. Fill in the gaps.

reproduce	pollen	pollinate	
germinate	nutrient	life cycle	sugar

1) Flowers have different parts. One part makes _____. It is a fine powder produced by flowers and cones.

2) Animals or wind can _____, or carry pollen to, another flower.

3) When plants _____, they make more of the same kind.

4) To _____ means to begin to grow.

5) The leaves use sunlight to make _____. The plant uses it for food.

6) The stages through which a living thing passes during its life are called a _____.

12. Conifer plants do not grow flowers. What do they grow to make seeds?

