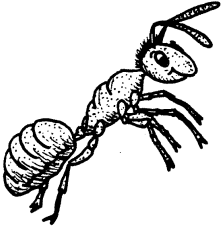


# ARNY BUILDS A PYRAMID - Ant Hill Gang Discovery Sheet

Name: \_\_\_\_\_

1. Draw a picture of an inclined plane.



2. What's another name for the object that you have drawn? \_\_\_\_\_

3. List the materials used in the inclined plane demonstration.

1) \_\_\_\_\_ 2) \_\_\_\_\_

3) \_\_\_\_\_ 4) \_\_\_\_\_

5) \_\_\_\_\_

4. Describe the procedure used in the inclined plane demonstration.

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5. How did the steepness of the ramp affect the force needed to pull the object up the ramp?

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6. How do inclined planes help people?

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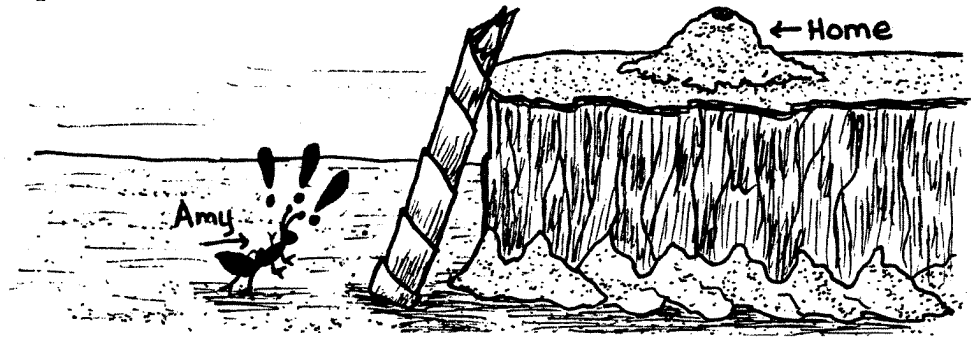
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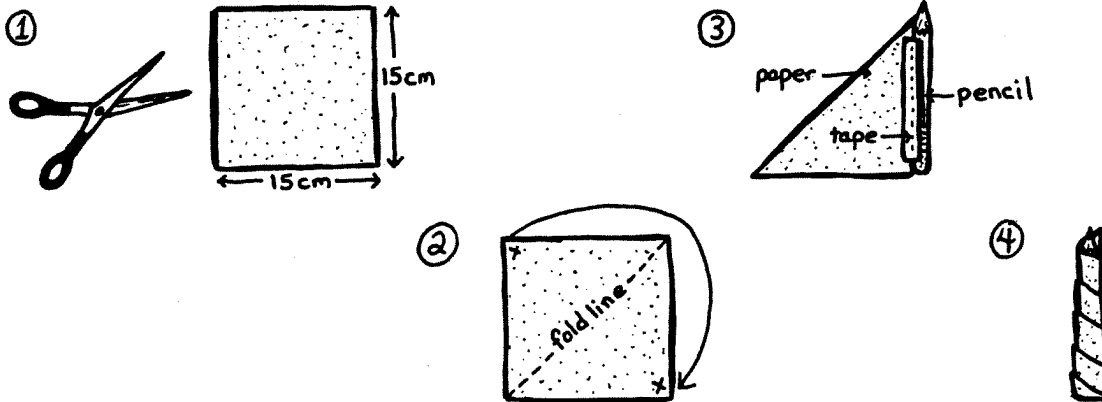
# AMY'S WAY HOME - Ant Hill Gang Discovery Sheet

Name: \_\_\_\_\_

1. **Problem:** Arny the Ant's little sister, Amy, is in need of some help. She has to climb up a pencil to get home but the pencil is too difficult and slippery to get up. Your job is to help Amy by building a spiral staircase or screw that she can climb up. Materials needed are a pencil, paper, scissors, tape and ruler.



2. **Procedure:** Cut out a piece of white paper into a square 15cm by 15cm. Fold the paper in half. Draw a dark line on the paper where the fold is. Tape one side of the paper to the pencil and wind it around the pencil. The paper should form a screw that will allow Amy to climb up and make it home.



3. What other type of simple machine is the screw closely related to? \_\_\_\_\_
4. List four uses of screws.
- a) \_\_\_\_\_ b) \_\_\_\_\_
- c) \_\_\_\_\_ d) \_\_\_\_\_
5. Why are screws often used to hold wooden chairs together instead of nails?

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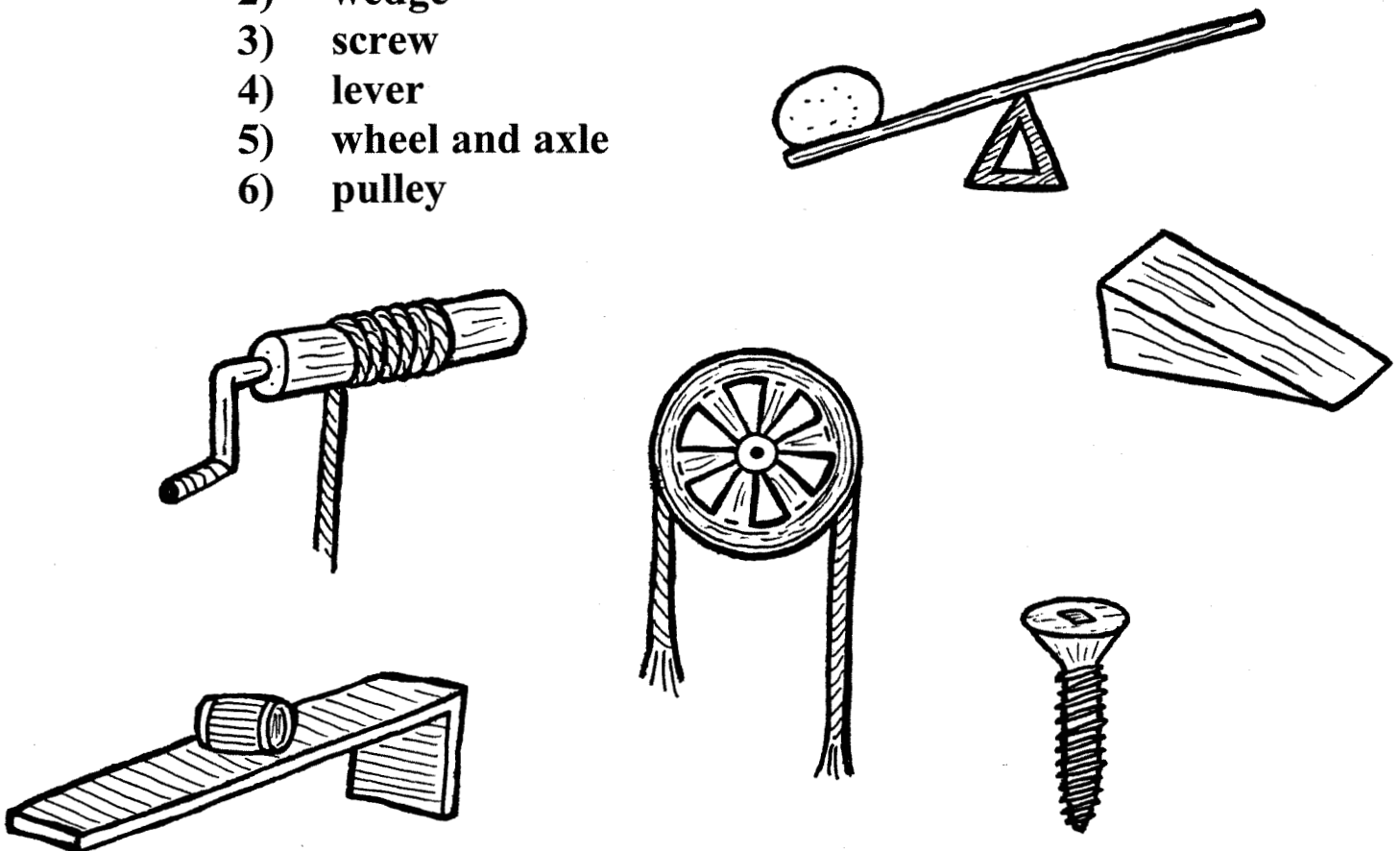
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**Bonus** On the back of this page, draw a picture of a complicated machine that uses a screw to help make work easier.

## Six Simple Machines

When people think of everyday machines like cars and eggbeaters, they seem quite complicated. However, no matter how complicated a machine is, it can be made using one or more of six types of simple machines. These simple machines are:

- 1) inclined plane
- 2) wedge
- 3) screw
- 4) lever
- 5) wheel and axle
- 6) pulley



*Factfile: It is thought by many that some of the first machines used by humans were crude stone tools for breaking bones and scraping meat from animal skins.*