

The Colors and Shapes of Language 2

Unit 10

Simple Machines

Activity 1 – Naming

The teacher says, “**Let’s name simple machines.**” Use pictures of the actual objects: lever & fulcrum, inclined plane, screw, wedge, wheel & axle, and pulley. [Students respond.]

- b. The teacher says, “**Let’s name things which have a wheel and axle as one of its parts.**” [Students name.]
- c. The teacher says, “**Let’s name things that have a pulley as one of its parts.**” [Students name.]

[The teacher needs a pair of scissors, wheel, pulley and a knife.]

Activity 2 – Describing

- a. The teacher shows a pair of scissors and says, “**I want you to describe this object. Tell me the name of this object.**” [Students respond.]

“**Tell me some categories or groups that scissors fit.**” [Students respond.]

“**Tell me the function of scissors. What are they for or how do you use them?**” [Students respond.]

“**Tell me the color of the scissors.**” [Students respond.]

“**Tell me their shape.**” [Students respond.]

The teacher shows a knife and says, “**Compare this to this.**

Let’s compare the colors, sizes, shapes, and functions of these two objects.” [Students respond.]

- b. The teacher shows a wheel and says, “**I want you to describe this object. Tell me the name of this object.**” [Students respond.]

“**Tell me some categories or groups that a wheel would belong.**” [Students respond.]

“**Tell me the function of a wheel. What is it for or how do you use it?**” [Students respond.]

“**Tell me the color of the wheel.**” [Students respond.]

“**Tell me its shape.**” [Students respond.]

The teacher shows a pulley and says, “**Compare this to this wheel to this pulley. Let’s compare the colors, sizes, shapes, and functions of these two objects.**” [Students respond.]

Activity 3 – Listening to a Story

The teacher reads this story.



Soap Box Derby Race

Bobby wanted to win a Soap Box Derby race. All he could think about were ways to make his car go fast. He spent every afternoon after school in the garage sawing, nailing, and painting his car. (Teacher draws a hammer.)

“Remember that you have to follow all the guidelines in the *All-American Soap Box Derby Stock Plan*, his father reminded him every night.

Bobby read and reread the rules, adjustments, and assembly instructions for the Soap Box Derby car kit his father had ordered for his twelfth birthday. (Teacher draws a paper with numbers.)

He had made the floorboard with stabilizer blocks and a brake pedal. He had mounted the steering assembly and axles. He had figured how much weight he would need to add so that the combined weight of the car and driver was no more than 200 pounds. All that was left was the lettering and decorations. (Teacher draws a letter.)

His father had said that he would sponsor him so that decal had been ordered. He peeked in the envelope with the national, local and city sponsor decals. Those would be placed on the body when the last coat of paint dried. (Teacher draws a circle with dad in it.)

The day of the big race, the sun shone brightly in a clear blue sky as Bobby pushed his car into place at the top of an overpass. The judges looked at each part of the car to make sure that everyone had followed the assembly rules. (Teacher draws a hump.) Automobiles had been detoured so that the racers could fly down the tallest hill in town, an overpass over the railroad tracks.

Bobby waited as his father held the back of his car. The starter dropped a flag and the racers were off, flying down the hill, wind blowing their hair. As he crossed the finish line Bobby could see two cars in front of him. Third place wasn't so bad. Next year he would build an even faster Soap Box Derby car. (Teacher writes a 3.)

- b. The teacher asks the following questions after reading the story:
- i. What did Bobby want to do?
 - ii. What guidelines did he have to follow?
 - iii. How many pounds could the driver and car weigh?
 - iv. Who sponsored him?
 - v. Where did the race take place?
 - vi. Who held the back of the car?
 - vii. Why do you think Bobby came in third?
 - viii. Would you like to enter a Soap Box Derby? Why or why not?



Activity 4 – Retelling the Story

- a. The teacher models the retelling of the story, “Soap Box Derby Race.” The teacher uses the drawings that were made as the story was told the first time.
- b. Students retell the story with a partner.
- c. Students take turns retelling the story using the pictures. The teacher guides students as they retell the story.

Activity 5 – Writing a Story

- a. Students write a narrative paragraph using this prompt: The best gift I ever received was. . .
- b. Students use the following outline to write the paragraph.
Sentence 1 – State event.
Sentence 2 – State what happened first.
Sentence 3 – State what happened next.
Sentence 4 – State what happened then.
Sentence 5 – State what happened finally.
Sentence 6 – Restate event.

Activity 6 – Editing

- a. Students edit paragraphs using the outline.
- b. Students share their paragraphs.

