

Push It or Pull It

Lesson at a glance:

Students will understand the difference between a push and pull and be able to relate the word force to these actions.

Grades:

K-2

Skills:

Observing, Comparing, Cooperating, Writing

Materials:

- ❑ A large toy car
- ❑ A large toy car with a string tied to the front bumper
- ❑ Sign with the word Push
- ❑ Sign with the word Pull
- ❑ A variety of objects that need to be pushed or pulled. (bike, broom, skateboard, skates, pen, pencil, etc.)



Background:

Forces can start something moving, change its speed or change its direction. Forces can also change the shape of an object.

Activity:

Part 1:

1. Set out the two toy cars - the one that needs to be pulled (e.g. toy car with a string attached) and a toy car that needs to be pushed.
2. Have two students come to the front of the classroom to make the toys move. Explain that the scientific term for push or pull is force.
3. Ask one student to pull the car with the string tied to it towards him/her.
4. Show the students the sign with the word **Pull** on it.
5. Now have the other student push the car without the string away from him/her.
6. Show the students the sign with the word **Push** on it.
7. Repeat the pushing and pulling motions while you hold both signs. Have the students point to the appropriate word to describe the motion.

Part 2:

8. Give the sign with the word **Push** to the student with the pushing toy.
9. Give the sign with the word **Pull** to the student with the pulling toy.
10. Position the students with their signs on opposite sides of the room.
11. Explain to the students that you will be bringing out more objects that work by a push or pull and that you will be calling on them individually to come to the front of the class and make an object work by pushing it or pulling it.



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12. Bring out the objects that need to be pushed or pulled and select a student to come to the front.
13. When each student finishes their task, ask them whether they used a push or a pull to make the object work. Then have them move to the side of the room with the appropriate word.
14. Each time a student completes the task, ask the student what scientific name do we give the words push and pull? The answer is Force.

Discussion:

1. Starting on the pushing side, review each object and make sure that the student is on the correct side.
2. Repeat this procedure on the pulling side.
3. Could any of the objects be pushed and pulled?

Assessment:

1. Have each student fold a piece of paper in half. On one half, have them write the word push and on the other, the word pull.
2. Have each student draw a picture of themselves pushing or pulling something under the appropriate words.



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