



Flexible & Rigid Review

Week 4 — Friday | Flexibility Investigation



Reviewing Flexibility

This week you explored **flexibility** and **rigidity**. You learned that flexible materials bend easily, like rubber and cloth. Rigid materials do not bend easily, like metal and wood. Some materials are somewhere in between, like plastic. Engineers use both flexible and rigid materials in their designs. A car has rigid parts to protect passengers and flexible parts like tires and seat belts for comfort and safety.



Review Questions

1. What is the difference between flexible and rigid?

2. Name two flexible materials you tested this week.

3. Why do engineers need both flexible and rigid materials?

4. Imagine you are designing a backpack. Which parts would be flexible and which would be rigid? Explain your choices.

True or False

A flexible material bends easily without breaking.	<i>True / False</i>
A rigid material bends easily.	<i>True / False</i>
A rubber band is flexible.	<i>True / False</i>
Wood is more flexible than rubber.	<i>True / False</i>
Engineers only use rigid materials in their designs.	<i>True / False</i>
A bridge needs to be mostly rigid but also somewhat flexible.	<i>True / False</i>

Match the Item

Item	Property Match
Rubber band	a. Mostly Rigid
Steel beam	b. Very Flexible
Cloth towel	c. Very Flexible
Concrete wall	d. Mostly Rigid
Plastic straw	e. Somewhere in Between

Design Something New

Design a product that uses both flexible and rigid parts. Label each part on your drawing.

My invention is called: _____

Flexible parts and why:

Rigid parts and why:

Science Journal

This week I learned about:

My favorite activity was:

Something I still wonder about:

★ Week 4 Review

Name 5 flexible things and 5 rigid things from your life:

Flexible: _____

Rigid: _____