

# You Choose

## Post-field trip lesson for Skyscraper Challenge

### Exploration

Ask students to look at and feel all of the objects. Once they have had a chance to inspect all of them, ask them to select the best material for making the following items:

1. Chair
2. Boat
3. Shirt
4. Book

### What You Will Need:

- Various items and materials with different properties, i.e. a book, paper towel, straw, piece of metal, piece of wood, cloth, piece of plastic, foil, etc.

After each object ask them what were the properties of that material that made it best suited for the job?

### Explanation

Explain that when people who build things, engineers, plan their projects they have to select materials that best fit what they are building. The materials that you used in each of the challenges might have properties that make them better for one type of building over another and as engineers it is our job to look at these.

### Extension

Have students identify materials that have been used in surprising ways. Discuss why the properties were chosen for that job? For example some dentists are using 3D printers to make teeth out of plastic!

### Other Resources

*Iggy Peck, Architect* by Andrea Beaty

[https://www.amazon.com/Iggy-Peck-Architect-Andrea-Beaty/dp/081091106X/ref=sr\\_1\\_1?ie=UTF8&qid=1467915224&sr=8-1&keywords=iggy+peck+architect](https://www.amazon.com/Iggy-Peck-Architect-Andrea-Beaty/dp/081091106X/ref=sr_1_1?ie=UTF8&qid=1467915224&sr=8-1&keywords=iggy+peck+architect)

### Nevada Academic Content Standards in Science

2PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

