

DEVELOPING  
OUR IDEASActivity 5  
**Density****Purpose**

In the previous activities, you measured two properties related to the amount of material of a solid or liquid object – its volume (the space it occupies) and its mass. However, the volume and mass of objects do not tell you about the *kind of materials* you have. The key question you will explore in this activity is:




**What property can help you decide what kind of material an object is made of?**


 Record the key question on your record sheet.

**We Think**

Two students want to construct a model airplane that will fly when launched. They have two different wooden materials available. They need to decide which one is better. For this purpose, they take a *small* cube of the first material and a *bigger* cube of the second material. They measure the masses of the cubes. They find that the mass of the first cube is 2 g and the mass of the second one is 7 g.

When trying to decide which material is best, the two students have different opinions.

-  Do you agree with Carlos, Nadia, or neither of them? Why? Discuss with your group. Record your answers on your record sheet.

 Participate in a class discussion about your answers.

Since lighter airplanes will fly better, the first material is better because it has less mass.

Carlos

I don't think so. The two cubes are different sizes. They have different volumes. You can't know which one is better.

Nadia