



WHAT'S THIS STUFF?

Student Activity Guide

Everything around you—your clothes, your dishes, your computer—is made of “stuff.” Stuff can be a material produced by humans or something found in nature.

Materials have different properties that help us determine how best to use them. For example, concrete is rigid and doesn't compress much, making it ideal for buildings and sidewalks, but a poor choice for sneakers, which need to be soft and flexible.

In this activity, you will follow clues to identify ten mystery materials. Some are materials we use every day, and others are on the cutting edge. Along the way, you will learn about the properties of these materials.

Think you know your stuff?

Instructions

Your challenge is to identify ten mystery materials based on the clues provided and your own research. There are ten clues for each item.

Use the Internet and other resources, as necessary, to help interpret each clue as you go. Your teacher will advise you on how best to conduct research online.

Record your research process in this booklet. Remember, the goal is not just to identify each mystery material—you must also explain how you figured it out. Describe how you researched the clues (include search terms and Web sites that you used) and whether any led you to guess an incorrect answer.

There is only one acceptable answer for each material but you can submit answers as often as you like. If you incorrectly identify a material, move on to the next clue, do some more research, and try again!

Mystery Material #9 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #10 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #7 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #8 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #1 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #2 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #3 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #4 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #5 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?

Mystery Material #6 is _____

Which clue or set of clues led you to the correct answer?

What research did you do to come up with the correct answer?