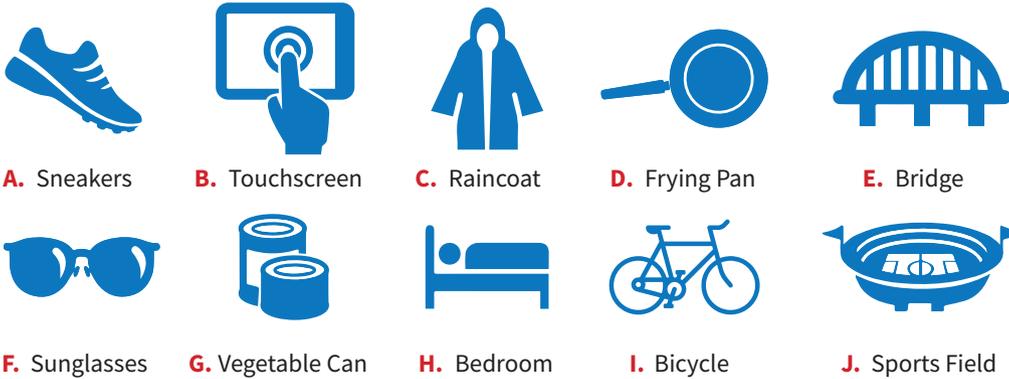
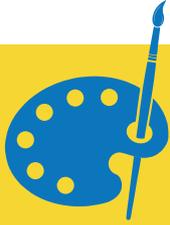


# You're Covered

Did you know that 70 percent of the items you encounter every day have some sort of protective or decorative coating? Whether it's on your walls, inside the tomato cans in your pantry, or covering the touchscreen of your tablet, coatings have got you covered!

**PART 1:** Coatings help protect the infrastructure and the environment; allow you to live, work, and play better every day; and even help you express your personality! See if you can match the objects listed below to the type of coating that helps them work for you. Write the correct letter in the column in front of the number.

**PAINTING YOUR FUTURE**

Can coatings paint your future? Think about your favorite hobby and how you might plan a career path that uses the science behind the coatings process to create an improvement or innovation in that hobby. Discuss your ideas with your family!

	1. Wall paint, available in thousands of colors and dozens of textures, allows you to personalize your space.
	2. Coatings keep metal from corroding and leeching into foods like tomatoes and beans.
	3. Invisible coating conducts an electrical charge so you can learn, play, and communicate.
	4. Special paint keeps metal frames from rusting; lubrication keeps all parts moving smoothly.
	5. Antimicrobial linings can help keep your feet smelling fresh; rubber soles give you traction.
	6. Anti-glare and scratchproof coatings are cost-effective ways to protect your eyes.
	7. High-tech coatings made from materials like rubber, resin, and plastic enable fabrics to repel water.
	8. Non-stick coatings make for quick cleanup after a late-night snack.
	9. Concrete and steel elements are coated to prevent rust and deterioration.
	10. Specialized paints are able to withstand friction from game play while maintaining boundary lines.

**PART 2:** Can you think of other ways that your daily needs are covered by coatings? Review the following applications for coatings, then brainstorm with your classmates to list your ideas for each one on the back of this sheet:

- A. Conduct an electrical charge.
- B. Protect clothing and other personal items.
- C. Prevent chemical reactions and corrosion.
- D. Add personality to a space or object.