

Fix It First

Students ask useful questions and connect simple problems to helpful tools.

K-2-ETS1-1 "Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool."

NAME _____

DATE _____

Teacher: this page is run aloud. The script and answers are on the guide page.

1 ASK FIRST _____

a	Where?	Pages?	Dark?
b	Weight?	Color?	Sound?

2 TOOL MATCH _____

Spills	•	•	Cart
Dark	•	•	Tray
Heavy	•	•	Lamp

HOW TO RUN THIS PAGE

Tell students that engineers notice a problem and ask questions to learn more before making or improving a tool. For example, if a door is hard to open, questions can help people decide what needs to change. Read every situation and every choice aloud.

Students never read directions on this sheet. Read each part's script aloud, then each prompt, giving think time before students mark.

PART 1 • ASK FIRST

SAY “Listen to each situation. I will read the choices. Which question would help you learn more? Circle it.”

ROW	SAY	STUDENTS CIRCLE
a	Water spills when a cup moves across a table. Which question would help you learn more about the spill: “Where?”, “Pages?”, or “Dark?”?	Where?
b	A bag is too heavy to carry. Which question would help you learn more: “Weight?”, “Color?”, or “Sound?”?	Weight?

PART 2 • TOOL MATCH

SAY “Each word on the left names a problem. I will read the problem words and the tool words. Which tool could be made or improved to help with each problem? Draw a line from each problem to a tool.”

- **Spills** matches **Tray**
- **Dark** matches **Lamp**
- **Heavy** matches **Cart**

WHAT TO ACCEPT

Ask First: circle Where? for the spill and Weight? for the heavy bag. Tool Match: Spills to Tray, Dark to Lamp, and Heavy to Cart.