

# Motion Detectives

Teacher-led team exploration of a paper clip's motion, with a question, observation, and explanation.

**SC.1.N.1.1** "Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations."

NAME \_\_\_\_\_

DATE \_\_\_\_\_

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

## 1 NOTICE IT \_\_\_\_\_

|   |         |       |        |
|---|---------|-------|--------|
| a | WHAT    | BLUE  | 4      |
| b | GROWS   | MELTS | MOVES  |
| c | BECAUSE | HELLO | PURPLE |

## 2 TELL WHY \_\_\_\_\_

|               |        |
|---------------|--------|
| It            | MOVED  |
| because<br>we | PUSHED |

**HOW TO RUN THIS PAGE**

Give each team a paper clip and a book. Have teams ask a question about what happens when they push the paper clip, then let them try gentle and stronger pushes on the worksheet and on the book cover. Students share what they observed and explain what action caused the change.

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

**PART 1 • NOTICE IT**

**SAY** “Listen to each question. Circle one big answer in each row.”

| ROW | SAY                                                                                   | STUDENTS CIRCLE |
|-----|---------------------------------------------------------------------------------------|-----------------|
| a   | Which word can start your team's question about what happens?                         | <b>WHAT</b>     |
| b   | After your team pushes the paper clip, which change can you observe? Circle the word. | <b>MOVES</b>    |
| c   | Which word can help you tell why you think something happened?                        | <b>BECAUSE</b>  |

**PART 2 • TELL WHY**

**SAY** “Talk with your team about what you saw. Say, “It moved because we pushed it.” Trace the word in each box as you say it.”

- Box 1 (beside It): **MOVED**
- Box 2 (beside because we): **PUSHED**

**WHAT TO ACCEPT**

Circle WHAT, MOVES, and BECAUSE. Accept traced MOVED and PUSHED, and accept an oral explanation that connects the paper clip's movement to the team's push.