INTERACTIONS

WHAT DIFFERENTIATES A SCRATCH PROJECT FROM A STILL IMAGE OR A VIDEO?

Tackle these nine puzzles that engage some of the more advanced concepts in Scratch related to interactivity. Each of these challenges has several possible solutions.

START HERE

- ❑ Create a Scratch program for each of the nine interactivity puzzles.

- ❑ **PUZZLE 1:** Whenever you press the B key, the sprite gets a little bigger. Whenever you press the S key, the sprite gets a little smaller.
- ❑ **PUZZLE 2:** Whenever the sprite hears a loud sound, it changes color.
- ❑ **PUZZLE 3:** Whenever the sprite is in the top 25% of the screen, it says "I like it up here."
- ❑ **PUZZLE 4:** When the sprite touches something blue, it plays a high note. When the sprite touches something red, it plays a low note.
- ❑ **PUZZLE 5:** Whenever two sprites collide, one of them says: "Excuse me."
- ❑ **PUZZLE 6:** Whenever the cat sprite gets near the dog sprite, the dog turns and runs from the cat.
- ❑ **PUZZLE 7:** Whenever you click on the background, a flower appears at that spot.
- ❑ **PUZZLE 8:** Whenever you click on a sprite, all other sprites do a dance.
- ❑ **PUZZLE 9:** Whenever you move the mouse-pointer, the sprite follows but doesn't touch the mouse-pointer.

FEELING STUCK?

THAT'S OKAY! TRY THESE THINGS...

- ❑ Before getting started in Scratch, write down ideas in your design journal for possible ways of programming each of the interactivity puzzles.
- ❑ Work with a neighbor. Collaborating with a partner can be a great way to solve problems and gain new perspectives on ways of programming in Scratch!

FINISHED?

- + Add each of the projects you create to the Interaction Studio: http://scratch.mit.edu/studios/487213
- + Help a neighbor!
- + Discuss your strategies for approaching each puzzle with a partner. Take notes about the similarities and differences in your methods.