

Lesson Plan 2 Outline

Objectives:

- Students learn to write methods (without parameters).
- Students learn how to manipulate subparts of objects.
 - Students will learn about orientation of objects, centers of objects, and the difference between *move* and *roll*.
- Students will use the *style* and *duration* parameters to improve the animation
- Students will modify the *color* property of an object.
- Students will use a *loop* construct.

Talking points:

1. Open a new animation, using the snow template.
2. Add an eskimo (People) and a hole (Shapes – change color to black).
3. Build a *stand* method for the Eskimo to bring down his arms.
 - a. The arms have odd orientations, motivating the discussion of orientation of the ego-centric nature of *Alice* objects and the use of the *axes* object (see Turn versus Roll handout and PowerPoint).
 - b. Set the *duration* to 0 on all method calls so that our Eskimo has his arms down at the beginning of the animation
4. Build a *walk* method for the eskimo.
 - a. Continue the discussion of subparts and ego-centricity.
5. Use the *loop* construct to make the Eskimo walk forward.
 - a. “How many times must you go through the loop so that the Eskimo is over the hole?” This will vary depending on how the student set up their animation.
 - b. Have the Eskimo fall through the hole (with a splash), and then come back up (down 10 meters and back up 9).
6. Give students time to complete the open ended story line.