

# Think Like An Innovator

## Flexible Thinking – 6 skills



### First Grade

#### Objectives

Identify creative thinking skills including fluency, flexibility, elaboration, and originality.

#### Materials

30 different objects, numbered  
bag to hold objects  
Thinking Strategy posters  
object key showing objects with numbers  
tally sheet  
timer  
*The Turn-Around. Upside-Down Alphabet Book*

#### Time

35 to 45 minutes

#### Intro: Whole Group (10 minutes)

Describe innovators and discuss examples of innovations in our world. Read pages from *The Turn-Around, Upside-Down Alphabet Book* to illustrate flexible thinking that leads to innovation. Share posters illustrating 6 flexible thinking techniques\*: modifying (includes maximizing and minimizing), substituting, putting to another use, and rearranging. You can mention that there are more ways to think innovatively, but we are discussing only a few.

\*Option 1: cover the example on each poster and ask students for ideas on how to change the original object displayed. Then share the printed example. This gives students time to practice the strategy as a group before attempting it on their own.

\*Option 2: If there are extra objects, use the techniques as a class to brainstorm innovative ideas for those objects

#### Flexible Thinking Activity (10 minutes)

Sit in a circle. Have each student reach into the bag of objects and, without looking, pull out one object. Provide students 3 minutes (with timer visible) to think independently of different possible ways to view and/or use the object. Provide 1 minute to share with a neighbor. Remind them of the 6 flexible thinking strategies: modifying, maximizing, minimizing, substituting, rearranging, and putting to another use. For a challenge, ask students to try to come up with an idea for each thinking strategy.

#### Idea Sharing – individual and group participation (20 minutes)

An important step in innovating is sharing your ideas. Innovators share their ideas so that others can help them and so that their innovations can be useful to others. We're going to see how many innovative ideas we can come up with for each object. Display the object key and, in order by the object number, have each innovator stand and share his/her ideas for the object. Allow each innovator a maximum of 30 seconds to share all of the ideas for the object and 30 seconds for ideas from the group. Using the tally sheet, keep track of the number of new ideas for each object (or make this a student job).

#### Closure ~ (5 minutes)

Look at the tally sheet. Which object(s) had the most innovative ideas? Why? Was it the object you would expect to have the most? Which had the least? What new ideas surprised you? What did you do to come up with new ideas? Are there any innovations from today that you would like to use? Do you have any innovative ideas for your classroom? When we look at familiar objects in a new way, we can come up with new ideas that might be useful to others. Keep up the flexible thinking, Innovators!

#### Vocabulary~

**Innovator** ~ n. a person who introduces new methods, ideas or products.

**Modify** ~ v. make partial or minor changes to something

**Maximize** ~ v. make as large or great as possible

**Minimize** ~ v. reduce in size or amount

**Substitute** ~ v. replace something with another

**Rearrange** ~ v. change position, time, or order of something

**Flexible thinking** ~ n. openness to different perspectives and ideas