

# Critical and Creative Thinking

Did you know that being a good thinker can help your middle grader do better in school, make good decisions, and deal with life's challenges? If he knows how to evaluate information and think creatively, he'll be better able to apply what he learns and handle everyday problems. Try these eight activities to practice thinking skills.

## 1. Maintain crowd control

Your tween will need to use logical thinking and good old-fashioned teamwork for this challenge. Have family members stand on a blanket or in an area sectioned off with rope. Then, gradually shrink the space (say, by folding part of the blanket or moving the rope a little at a time). They will have to keep arranging themselves in different ways to stay inside the space. How small can the area get before they no longer fit?

## 2. He's more like...



Ask your child to decide whether family members or friends are more like one thing than another. For example, is his brother Josh more like a family car, a sports car, or an all-terrain vehicle? He will have to consider people's personalities and the options to choose an answer. Once



he does, he can explain his thinking. He might say Josh is always zooming here and there, so he reminds him of a sports car, while his friend Allen is like an all-terrain vehicle because he loves adventure.

## 3. Measure without numbers

Have your tween get different-sized containers to measure out exactly 4 oz. of water. For example, could she measure 4 oz. using 3-oz., 6-oz., and 8-oz. containers? How about using just a 3-oz. and a 5-oz. container? What creative ways can she come up with to get the correct amount of water? Give her a measuring cup to check her results. *Idea:* Can she find a combination of containers that makes it impossible to measure 4 oz.?



## Fast forward: Why it counts

Picture your child in the workplace 10–15 years from now. Will she have what it takes to thrive? Being a good thinker and problem solver will go a long way toward helping her succeed.

**Critical thinkers** think for themselves. They look at and evaluate information to reach a logical conclusion or make an informed choice. This skill will let your tween analyze everything from math problems in school to marketing opportunities in a future job.

**Creative thinkers** are in the idea business. They can look at a task, challenge, or situation in multiple ways—so their thinking takes them where others might not go. Being

creative allows your child to come up with clever approaches to presentations and papers. At work, it could help her think of better ways to handle customer service calls or develop new products her company might sell.

**Problem solvers** identify what is wrong and figure out how to fix it. They compare solutions, pick the best one to try first, and keep going until they find a strategy that works. This kind of thinking and persistence is important in all schoolwork, from science experiments to research projects. And it can help your middle grader solve workplace issues, whether it's making sure colleagues get along better or streamlining a manufacturing process.

#### 4. You don't say

Encourage your tween to use language creatively with this game. Choose three words that everyone in the family has to avoid for an entire day. Pick ones that would be tough to do without (*do, like, you*). They will have to use other phrases to get the point across. *Examples:* "I want to *try* that" instead of "I want to *do* that" or "I'm *fond of* that movie" rather than "I *like* that movie." Another day, select three more "forbidden" words! *Idea:* Pick a phrase that family members often use, such as "Just sayin'" or "My bad," and make it off limits—see what creative new phrases your youngster can come up with that are more meaningful or accurate.

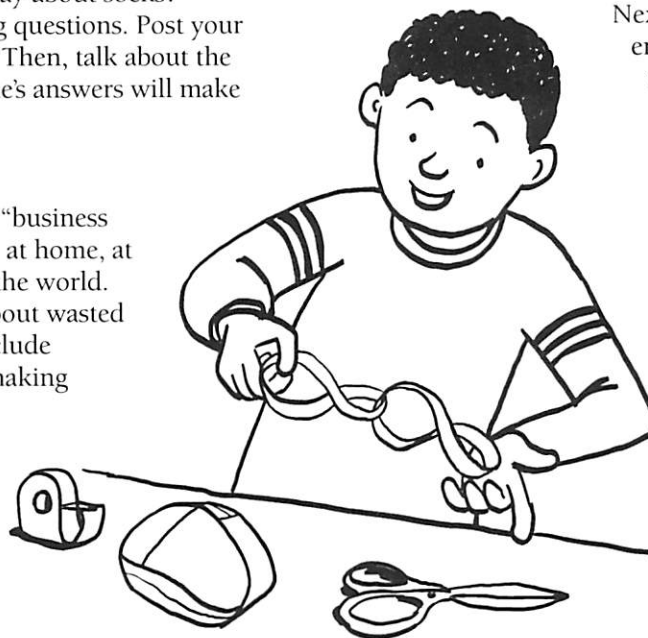


#### 5. Pose creative questions

How would the world change if no one needed water? How might your child celebrate a holiday about socks? Together, brainstorm a list of interesting questions. Post your list, and add to it as you think of more. Then, talk about the questions over dinner. Hearing everyone's answers will make for interesting and fun conversations.

#### 6. I've got this!

Ask your middle schooler to write a "business plan" for solving a real problem he sees at home, at school, in your community, or around the world. For instance, maybe he is concerned about wasted food in the cafeteria. His plan could include launching an awareness campaign by making flyers about food waste and hunger, and designating a donation bin where students can place uneaten fresh fruit and unopened packaged foods. Finally, encourage him to take steps to put his plan into action.



#### 7. Engineer away

Suggest that your tween challenge her friends or family members to build something with household materials. Each person could decide what to create (a zip line for stuffed animals or a musical instrument). Then, gather materials like cardboard boxes, string, old toys, broken appliances, and tools. Display your creations, and take turns showing—and explaining—how they work. *Variation:* Have everyone collaborate on one big project.

#### 8. Make a Möbius strip

A *Möbius strip* is a twisted loop of paper that will stretch your middle grader's thinking as he tries to analyze how it works. To make one, have him cut a 2" x 11" strip of paper and draw a line down the center. Next, he should hold opposite ends, twist the paper once in the center, and tape the ends together. Let him predict what will happen if he cuts along the line. (He will create a longer, thinner Möbius strip.) Why does he think it's still in one piece? What will happen if he:

- cuts it down the center again?
- draws and cuts along a line closer to the edge of the strip?
- makes a new strip with two or three twists?

## Middle Years