
Activity Planner

Activity Title: _____

1 Review the Activity

Do you think your kids would like this activity?

Yes No

Is this activity age-appropriate for your kids?

Yes No

2 Test the Activity

Which steps may be difficult or easy?

Are you comfortable with the science concepts in this activity?

Yes No, need some support materials

(For background on science concepts, check out the books and Web sites listed in the Resources section of the ZOOMsci Training. If it's a ZOOM activity, review the Science Scoop.)

Notes on science concepts:

List activity variables (things kids can change that will affect activity results):

3 Plan the Activity

How will kids work on the activity (on their own or in groups)?

How will you introduce the activity?

(For example, ask kids what they already know about the activity, make connections to the real world, or demonstrate parts of the activity.)

List questions to ask kids as they work:

(For suggestions, see the “Doing What Scientists Do” handout in the Wrap Up section of the ZOOMsci Training.)

What new materials or challenges can you use to extend the activity?

(Check the ZOOMon™ section of the activity sheet or develop your own ideas.)

List questions to ask to help kids share their results:

How can you enhance the activity?

(For example, follow up with activities that explore similar concepts, plan a field trip, or invite a guest scientist, engineer, or professional whose career relates to the activity.)

4 Collect Materials

Material	Amount per Group	Total Amount	Already Have	Need to buy or collect (source)
<i>For example: newspaper</i>	<i>5 sheets</i>	<i>40 sheets</i>		✓ (recycle bin)

Distribution of materials (check one):

- Place materials on a table accessible by all
- Prepare material sets for each group
- Other



5 Lead the Activity

6 Evaluate

___ **Great—Would do this activity again as is.**

___ **Good—Would do it again with these changes:**

___ **Would not do it again for these reasons:**

Sample Activity Planner

Activity Title: Water on a String

1 Review the Activity

Do you think your kids would like this activity?

Yes No

Might be best to do on a warm, sunny day when we can be outside

Is this activity age-appropriate for your kids?

Yes No

Kids older than 8 will be better at pouring, but if it's done outside, spills won't matter.

2 Test the Activity

Which steps may be difficult or easy?

Kids may have to reach pretty high to get the string at the correct angle when working at a table.

It might be easier for them to work directly on the floor or ground.

Are you comfortable with the science concepts in this activity?

Yes No, need some support materials

(For background on science concepts, check out the books and Web sites listed in the Resources section of the ZOOMsci Training. If it's a ZOOM activity, review the Science Scoop.)

Notes on science concepts:

Cohesion – when water sticks to itself. Example: raindrops.

Adhesion – when water sticks to another substance. Example: When you put a corner of a paper towel in a puddle, the water sticks to the paper towel.

List activity variables (things kids can change that will affect the activity results):

- *Type of string*
- *Speed of pouring water*
- *Angle at which the string is held*
- *How tight the string is*

3 Plan the Activity

How will kids work on the activity (on their own or in groups)?

Have kids work in pairs.

How will you introduce the activity?

(For example, ask kids what they already know about the activity, make connections to the real world, or demonstrate parts of the activity.)

Introduce adhesion and cohesion using examples that they are likely to be familiar with, such as water molecules sticking together to make raindrops (cohesion) or water molecules sticking to a paper towel (adhesion).

Introduce the materials and the “rules” of the challenge (must keep cups at least 2 feet apart).

List questions to ask kids as they work:

(For suggestions, see the “Doing What Scientists Do” handout in the Wrap Up section of the ZOOMsci Training.)

- *What do you want the water to do?*
- *How can you make sure the water doesn’t have to travel UP the string?*
- *How did you come up with that idea?*
- *What would happen if you used another kind of string?*

What new materials or challenges can you use to extend the activity?

(Check the ZOOMon™ section of the activity sheet or develop your own ideas.)

- *Different types of string (yarn, twine, and rope made of different materials like nylon, cotton, wool, or plastic)*
- *Different lengths of string*
- *Make a “water bridge” from two pieces of string.*
- *Increase the distance between the cups from 2 feet to 20 feet.*

List questions to ask to help kids share their results:

- *What were some of your very first ideas? Did they work?*
- *If they didn't work, what did you learn?*
- *How did you change your plan? Did that work better?*
- *What would you try if you had more time? What questions do you still have?*
- *Have you seen water stick to things before? Give some examples.*

How can you enhance the activity?

(For example, follow up with activities that explore similar concepts, plan a field trip, or invite a guest scientist, engineer, or professional whose career relates to the activity.)

- *Invite a botanist to discuss how plants use adhesion to take in water.*
- *Try out the ZOOM activity Drops on a Penny.*

4 Collect Materials

Material	Amount per Group	Total Amount	Already Have	Need to buy or collect (source)
<i>newspaper</i>	<i>3 sheets</i>	<i>24 sheets</i>	<i>✓ at home</i>	
<i>buckets (for extra water)</i>		<i>2</i>	<i>✓ at home</i>	
<i>water</i>	<i>about 2 cups</i>	<i>about 16 cups</i>		<i>✓ bathroom sink</i>
<i>paper cups</i>	<i>3 cups</i>	<i>24 cups</i>		<i>✓ food store</i>
<i>cotton string</i>	<i>3 feet</i>	<i>24 feet or more</i>		<i>✓ hardware store</i>
<i>ruler</i>	<i>1</i>	<i>8</i>	<i>✓</i>	
<i>tape</i>	<i>1 foot</i>	<i>8 feet</i>	<i>✓</i>	
<i>scissors</i>	<i>1</i>	<i>8</i>	<i>✓</i>	
<i>wool yarn, nylon string, cotton yarn, cotton rope, etc.</i>		<i>one roll of each type</i>		<i>✓ hardware store</i>

Distribution of materials (check one):

- Place materials on a table accessible by all
- Prepare material sets for each group
- Other

Provide each team with the newspaper, cups, cotton string, ruler, scissors, and tape. Put water in buckets and leave in a central area where kids can fill their cups. Set aside different types of string for an extension challenge.



5 Lead the Activity

6 Evaluate

_____ **Great—Would do this activity again as is.**

✓ _____ **Good—Would do it again with these changes:**

Save it for a sunny day. Best done outdoors where water is not a clean-up issue.

_____ **Would not do it again for these reasons:**