



# Middle School Science Learning Plans

These plans are also available on our website:

[www.accomack.k12.va.us](http://www.accomack.k12.va.us)

*Please note: The online portion of these plans is optional.*

### Solar System Model

#### Online Options:

- Using [Google docs](#) create a 2D model of the solar system to Jupiter including the asteroid belt. (A scale model is a representation or copy of an object that is larger or smaller than the actual size of the object being represented.) Be sure planets show relative sizes and distances from each other. Students will need to label the distance from the sun, the length of the day (rotation) and year (revolution), the number of moons, and 2 facts about each planet using a text box above or below each planet.

<https://flexbooks.ck12.org/cbook/ck-12-middle-school-earth-science-flexbook-2.0/section/22.5>

<https://solarsystem.nasa.gov/resources/490/our-solar-system/>

#### Offline Options:

- Create a 2D or 3D model or illustration of the solar system to Jupiter including the asteroid belt. Be sure planets show relative sizes and distances from each other. Students need to label the distance from the sun, the length of the day (rotation) and year (revolution), the number of moons, and 2 facts about each planet. Students may use household items, styrofoam balls, cut paper, fruit, coins, or any other objects they find to create a 3D model.

#### Materials Needed:

- Notes on the solar system
- Textbook Chapter 18

### Water

#### Online Options:

Create a digital advertisement using any of the following: [Google Docs](#), [Google Drawings](#), Microsoft Word, Microsoft PowerPoint.

\*This activity can be found in the Prentice Hall Science Explorer Textbook on page 55.

Directions: Imagine that you work at an advertising agency. Your agency has just been hired to design an advertising campaign for water. You know that water has many properties that make it unique. Your plan is to highlight one or more of these properties in an ad to show people what an unusual substance water is.

- Before starting, decide what properties you will highlight in your ad. Write down some facts about each property that you think will interest people. Now you are ready to create the ad. Use humor, pictures, and everyday examples to make your point in an appealing way. Will your ad convince people that water is a unique substance?

Essential questions and criteria for your digital advertisement:

- Make sure you have *at least* 5 different properties of water. After you select the properties you find most intriguing and think would work for a campaign, write down a few facts about each property to add more detail.
- What makes water unique compared to other substances that you could include on your advertisement?
- What is the structure of a water molecule? Is there somewhere on the advertisement you could include this?

- Make sure your advertisement is eye-catching by adding images that correspond with the properties you include.
- The advertisement should be neat and easily understood. You are making this for someone that does not know anything about water, so make sure the properties you include are detailed.

Online resources:

- <https://www.brainpop.com/science/earthsystem/water/>
- <https://www.brainpop.com/science/matterandchemistry/matterchangingstates/>
- <http://www.sciencekids.co.nz/sciencefacts/water.html>

### Offline Options:

Create a paper advertisement for properties of water.

\*This activity can be found in the Prentice Hall Science Explorer Textbook on page 55.

Directions: Imagine that you work at an advertising agency. Your agency has just been hired to design an advertising campaign for water. You know that water has many properties that make it unique. Your plan is to highlight one or more of these properties in an ad to show people what an unusual substance water is.

Before starting, decide what properties you will highlight in your ad. Write down some facts about each property that you think will interest people. Now you are ready to create the ad. Use humor, pictures, and everyday examples to make your point in an appealing way. Will your ad convince people that water is a unique substance?

Essential questions and criteria for your advertisement:

- Make sure you have *at least* 5 different properties of water. After you select the properties you find most intriguing and think would work for a campaign, write down a few facts about each property to add more detail.
- What makes water unique compared to other substances that you could include on your advertisement?
- What is the structure of a water molecule? Is there somewhere on the advertisement you could include this?
- Make sure your advertisement is eye-catching by adding images that correspond with the properties you include.
- The advertisement should be neat and easily understood. You are making this for someone that does not know anything about water, so make sure the properties you include are detailed.

Offline resources:

- Prentice Hall Science Explorer Textbook pages 50-64
- Notebook