

# RECYCLING LESSON VIA VIRTUAL WORLD (WHYVILLE.COM)\*

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## Abstract

This is Kindergarten lesson plan about recycling. Students will play a game on Whyville.com and then participate in a discussion board.

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### Grade Level:

Kindergarten

### Subject:

Science

### Objectives and Goals

Students will identify different waste products and know where to distribute them correctly. (Trash bin, plastic bin, etc) They will also learn to navigate on Whyville (Virtual world)

### Website used:

[www.whyville.com](http://www.whyville.com) What is Whyville? Whyville is a virtual world (online science community) for kids and teens. It is free and offers many educational games. Whyville is learner centered and inquiry based. Students and the teacher can design their own avatar.

### Preparation:

Teacher must make an account with Whyville.com. They can choose to have a private class or have their class open to the public (meaning students could come in contact with other children in chat rooms). Teacher must get permission slips signed by parents and then send them to whyville if they would like to receive more clams (the salary in whyville). For this particular lesson the teacher would have to go onto the forums page (located on the left-destination bus and click on forums). Then the teacher would choose science and create a discussion about recycling. Sample questions for forum: What does it mean if you recycle? Why is recycling important? Do you recycle at home? Where are some places where you see recycling bins?

### Materials:

Computers, glass jar, plastic bottle, paper, basic trash.

### Direct Instruction

Show students how to navigate to the different cafeteria rooms. Have different examples of different waste items in the classroom to show students (ranging from glass jars, plastic bottles, paper boxes and random trash) Explain that when these items are placed in the correct areas they can be reused that way we are not being wasteful.

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**Guided Practice:**

Model the game prior to letting students explore. Show them how to pick up the trash items. Have students tell you where to place the items to check for understanding. Once you completed a round and students seem to understand let students play.

**Independent Practice:**

Students explore Whyville's cafeteria trash game. Students choose a dirty room and they must place each piece of trash in its appropriate box. (Plastics, Paper, glass, and trash). If Students can dispose all the trash correctly before the timer is up then they earn a clam for each item they disposed. (Go to Play tab, click on Recycle)

**Assessment:**

Have students go to the forums page and find the thread titled "recycle". Students need to answer the questions about recycling. (Forum- Health & Science: The earth: Recycle) Students must write at least 5 sentences about recycling. At the Kindergarten level, I wouldn't necessarily give a grade for the responses. This assessment is for the teacher to check for understanding to see which students have grasped the concept and which students still need more help.

**Technology enhances learning!**

In what environment can technology promote learning? Technology is promoting learning in this project by familiarizing students with basic 21st century skills via computer and internet. Students will collaborate with the teacher and other classmates through the online forum and they can play the recycling game on whyville to enhance their learning about how to recycle different items. What is the process by which technology enhances learning? The students are applying what they already know about recycling and how to collaborate with others and taking it to a new level by applying it through the computer. Students will have to learn new skills (how to navigate a mouse, how to move their avatar), therefore the internet is enhancing their learning during this process.

**Research Supporting Project:**

How does learning occur? Steinkuehler and Williams (2006) found that interacting within virtual worlds not only helps people build communities but also exposes them to a "diversity of world views" through the development of these virtual social relationships (p. 21). There is a general agreement that virtual worlds can have a strong motivational impact.

**References:**

Bricken, M. (1991). Virtual reality learning environments: Potentials and challenges. *Computer Graphics* 25(3), 178-184. Steinkuehler, C., Williams, D. (2006). Where everybody knows your screen name: Online games as third places. *Journal of Computer-mediated communication*, 11(4), Article 1.