

GED 2002 Teachers' Handbook of Lesson Plans

Area/Skill - Science	Cognitive Skill Level - Application	Correlation to Science Framework - 03.05/03.07	Lesson Number - 18
<p>Activity Title - Science - It's Everywhere!</p> <p>Goal/Objective</p> <p>To utilize the world of science in everyday life.</p> <p>Lesson Outline</p> <p>Introduction</p> <p>Science is all around us. The GED Tests require that students are able to problem solve and apply scientific concepts to real-world events. This lesson will require that students identify how they use science in their lives each day and how they apply “scientific concepts” to their own world.</p> <p>Activity</p> <p>Have students brainstorm all of the ways that they have used science since they first got up this morning. List all of the answers on the board, including duplicate answers. One of the answers will generally be related to electricity. Next, have students identify ways in which they use electricity in their lives. Examples may include: lights, air conditioning, heat, television, radio, maybe even transportation! Discuss with students what they would do if one day there was no electricity in their homes. What steps would they take? Brainstorm possible solutions.</p> <p>Debriefing/Evaluation Activity</p> <p>Have students develop sample questions on science in the everyday world. Have the students develop questions that show how science can be applied to the workplace or the community. Have them put their questions on strips of paper with the answers on the back. Use the questions for games such as Science Jeopardy or Bingo.</p>		<p>Materials/Texts/Realia/Handouts</p> <ul style="list-style-type: none"> • Chart paper, markers 	
		<p>Extension Activity</p> <p>Using science books or other research materials, have students identify basic scientific concepts. Have the students list real-life applications of each of the concepts in both their workplace and in their homes. Examples may include such things as Newton's Law of Motion and the effect of those laws in such things as kicking a ball or driving a car.</p>	
<p>Real-Life Connection</p> <p>Ask students if they have ever walked into a room and tried to turn on the light switch but nothing happened? Have students brainstorm what steps they took to check what problem existed. Sample answers may include: the light bulb burned out, the fuse blew, a light pole was hit, etc.</p>		<p>ESE/ESOL Accommodations</p> <ul style="list-style-type: none"> • Repeat, paraphrase and summarize important points. • Use real-life examples and concrete materials. • Allow active involvement through asking questions and small group discussion. 	

GED 2002 Teachers' Handbook of Lesson Plans - Script

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Activity Title - Science - It's Everywhere!

Introduction

Say: Science is everywhere. Take two minutes and write down as many ways as you can that you have used science since you woke up this morning. Have students share their responses and write them on the board. Discuss the prevalence of science in everyday life. *Say:* Many times we take science very much for granted. Let's look at one example

Main Activity

Ask: Have you ever walked into a room and turned on the light switch, only to find out that nothing happened? *Say:* Think back to the last time this happened. You knew that something was wrong so you immediately called the power company. Did you actually have enough of the right information to take this next step? Discuss that the lack of lights could lead to many possible, correct conclusions. *Ask:* Before you called the power company what should have been your next step? Have students brainstorm possible options. Samples could include the following - Did you see whether the other houses on your street had lights? Did you check the fuse box? Did you check whether you had paid the electric bill? Did you check whether other lights in your house worked or not? Was the light bulb burned out?

Discuss the importance of using a problem solving approach in the GED Tests such as the scientific method. *Say:* The GED Tests will require that you problem solve or apply scientific concepts to the real-world.

Closure/Conclusion

Say: The concept of electricity is an important one. Explain that electricity flows in a circuit. If the circuit is broken in some way, such as a burned out bulb, the electricity cannot get through. Have the students identify different electrical circuits in the classroom such as the overhead, which is plugged into an outlet on the wall that is operated from a switch by the door. Have the students draw a diagram of the electrical circuit that they have located. Share the diagrams with the class.

Follow-Up Lessons/Activities

Have students identify scientific concepts that they use in their workplace and at home and keep a journal of the examples. Examples may include such things as Newton's Laws of Motion, gravity, electromagnetic fields, etc. Have students discuss these concepts in class and how they were applied to their daily lives.