



Learning About Careers

***Learning about Careers* highlights 32 careers in 16 career clusters in a series of 32 easy-to-understand lessons. Each lesson gives a simple overview of one career and then asks students to identify the skills, knowledge, and characteristics they believe would be most helpful in achieving success in the career.**

Then, for a truer understanding of the career, students are asked to apply their academic skills to typical tasks an employee would be expected to fulfill as part of the job. The activities present a real-life view of the type of work employees in the career encounter each day. After completing the activities, students will be able to make preliminary decisions regarding whether the career is one they want to learn more about. Hands-on-Academics is recommended as a follow-up to ***Learning about Careers***.

Features

Five- to eight-page lessons

Career overview

Three to four activities

Instructor's Guide

Correlations to standards

Suggestions for expanding the lesson

Related Web site

Solutions to activities

Item Code: LC 1010

Price: \$249



1199 Lancaster Avenue
Berwyn, PA 19312
Toll free: 1-888-299-2784
Fax: (610) 993-8249
www.careersolutionsgroup.com

Special Effects Technician



Standards: (1) Manages vocabulary on a topic so it is easily understood.

(2) Uses correct mechanics and punctuation to guide the reader through the text. (3) Generates or solves multi-step real-world problems. (4) Uses math in real-world situations.

Correlations: Communication, writing, math, career awareness

Meteor headed for earth!

In your job as a special effects technician, you make movie and TV magic. You use your creativity and technical skills to create the special effects that make audiences feel like they are re-entering earth from outer space or fighting off giant aliens. The pressure to meet deadlines is often intense.

You consider yourself a jack-of-all trades because you do so many different things. Sometimes you're a plumber who rigs toilets to overflow or a carpenter who builds sets that fall apart at the tug of a rope. What skills will you need as a special effects technician?

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

Yark Attack

Like a magician, you create illusions. You work with other people to decide what is needed in a scene; then you figure out how to produce the desired effect. When the script calls for a scene that will knock the audience out of their seats, you use your imagination and creativity.

One scene from a movie script is shown below. Work with a partner or a team to finish the scene in a way that will make the audience scream and gasp.

"The World Beyond", Scene 2

Laura and Cam are hiding in the hills

Our two teens have managed to sneak away from the vicious, salivating creatures from Yark. Their clothes are covered with a tar-like substance that turns florescent purple when it is touches any surface. Unknown to Laura and Cam, they have left bright purple evidence of their escape route. The invaders see them behind a giant rock and, with their oversized hands, zap the tar on their clothes, which turns the tar_____

Finish this scene and describe the special visual and sound effects you will use. On the next page, write clear directions for your team to follow in creating the scene. Check your grammar and spelling for accuracy. Ask a team member to read your directions to make sure they are easy to understand.

Yark Attack (continued)

Volcanic Eruption

You have been asked to work on a new feature film that includes a volcano eruption. As the special effects technician, you must create a scale version of the mountain and a town at the foot of the mountains. The real mountain that the film director is using for scenery shots is 8,000 feet tall and 12,000 feet wide at the base. The producer wants your model of the mountain to be 8 feet high.

1. What scale will you use? One foot of the model mountain will represent how many thousands of feet of the real mountain?

2. How wide will the model mountain be at the base? _____

Hot Lava

The film's director wants the audience to see the eruption of the volcano at the top of the scale mountain you created. Your design allows for the artificial lava to flow at a rate of $\frac{1}{2}$ inch per second down the side of the 10' model mountain.

1. How long will the lava take to reach the town below? _____

Budget Agony

Coming up with a budget is one of your hardest jobs because props, staging scenes, pyrotechnics, and other items always seem to cost more than the studio wants to allot. You are asked to submit a budget for a scene that requires many automobiles. The items you want to acquire are listed below. The vehicles to be rented will be returned and those to be purchased will be destroyed in chase scenes.

Create a budget and list each of the items under the headings provided on the next page, starting with the least expensive first and ending with the most expensive item. Assume that you need each of the vehicles for the months of August and September. Calculate the cost for each item and the total budget for the scene.

1. Blue Mercedes sedan from Imperial Autos leased for \$2000 per month
2. Yellow school bus from Toddler Town Day Care to be rented for \$25 per day
3. Red Jeep Wrangler from Bill's Autos purchased for \$500 lump
4. White Honda Accord from Bill's Autos rented for \$450 per month
5. Dark green Chrysler minivan from Bill's Autos rented for \$600 per month
6. Silver BME coupe from Imperial Autos rented for \$1500 per month
7. Yellow, VW beetle from Bill's Autos purchased for \$1,000 lump

Budget Agony (continued)

	Color	Vehicle	Owner	Cost	Total Item cost
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Total Budget Request

Instructor's Guide

Special effects technician is one of several occupations related to filming that require similar education and training. To learn about other careers in this Communications and the Arts pathways, students may wish to investigate these careers: animator, camera operator, broadcast technician, recording or sound engineer, and lighting technician.

Training requirements vary for special effects technicians; however, a combination of training and education is often required. Volunteering on special effects projects is a way to break into the field. It is useful to have training or experience in computers, drawing, electronics, or in the mechanical or electrical trades. A college diploma is helpful, but not always necessary. Many special effects technicians work independently and may experience periods of unemployment between projects.

To expand the lesson, engage students in a discussion of safety concerns related to this career. Because special effects technicians often deal with explosives, fires, and other dangerous effects, safety is a key element of their training. To further expand the lesson, organize students into groups and ask them to brainstorm the safety measures that would be needed for scenes from *Yark Attack* and *Volcanic Explosion*.

Related Web Site

Students can learn more about the special effects career, as well as related careers, at the Web site listed below. In addition to valuable information, both an interest inventory and skills inventory are available. To add a dimension to this lesson, ask your students to complete the inventories.

Salary information is given in Canadian dollars. You can add a math component to the lesson by having students convert the Canadian salary to U.S. dollars (the exchange rate on January 23, 2007 was .8470, meaning that \$1 in Canada was worth 84.7 cents in the U.S).

http://www.careerccc.org/careerdirections/eng/e_oc_dwn.asp?ID=46&Alpha=No

Solutions to Activities

Students may provide different responses for some activities. Accept all responses that are feasible and accurate.

Meteor headed for earth

- | | |
|----------------------|--|
| 1. imagination | 4. computer skills |
| 2. electrical skills | 5. ability to follow directions |
| 3. carpentry skills | 6. ability to work under deadline pressure |

Yark Attack

Students will create many different ways for this scene to play out. Most of their answers will be appropriate. The purpose of the activity is to require them to think creatively, to use problem solving skills to develop a special effects solution, to work as members of a team, and to write directions as would be required in a work situation.

Volcanic Eruption

1. 1:1000 (8/8,000)
2. 12 feet (1/1000 X 12,000)

Hot Lava

240 seconds

Solutions to Activities (continued)

Budget Agony

Color	Vehicle	Owner	Item Cost	Total per item
Red	Jeep	Bill's Autos	Purchased/\$500	\$ 500
White	Honda	Bill's Autos	Rented/\$450 per month	\$ 900
Yellow	VW	Bill's Autos	Purchased/\$1,000	\$1,000
Green	Chrysler	Bill's Autos	Rented/\$600 per month	\$1,200
Yellow	school bus	Toddler Town	Rented/\$25 per day	\$1,525
Silver	BMW	Imperial Autos	Rented/\$1,500 per month	\$3,000
Blue	Mercedes	Imperial Autos	Leased/\$2,000 per month	<u>\$4,000</u>
				\$12,125