What Do They Do with All That Poo?

by Jane Kurtz Simon & Schuster, Inc. 2018



Human Resources at the Zoo

BOOK SYNOPSIS: Twelve different zoo animals are featured in this book; all contributing different kinds and amounts of waste products each day. What happens to this waste? Some is trucked to landfills, some is used by scientist to help with animal research, some is sold to use as compost and some is used to make elephant-poo paper.

TIME REQUIRED: 30-40 minutes

GRADE LEVEL: 3-6

OBJECTIVES:

- The student will be introduced to the concepts of choice, entrepreneur, goods, human capital, human resources, services, and specialization.
- The student will participate in a creative writing activity featuring the creation of new words based on Greek and Roman prefixes, suffixes, and root words.
- The students will demonstrate knowledge of economic concepts by answering posed questions in an informed and intentional manner.

MATERIALS:

- Book What Do They Do with All That Poo? by Jane Kurtz
- Visual 1- ZOO WORKERS: Human Resources
- Visual 2- Creating Your Own Human Resource Human Resources at the Zoo
- Activity Sheet Creating New Human Resources at the Zoo
- Writing Tools
- Dice, or other selection tools such as spinners
- Document Camera or similar projection device

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ECONOMIC CONCEPTS

- **Choice** selecting something over another thing.
- **Entrepreneur** person who comes up with an idea for a better service or product, or a better way to produce one. The entrepreneur organizes the natural, human, and capital resources needed to produce that good or service.
- Goods -tangible objects that can be bought and sold, such as cars, houses, computers, and cell phones.
- **Human Capital** labor resources that can be improved though investments in education, training, and health care.
- **Human Resources** the quality and quantity of human effort directed toward producing goods and services.
- **Services** actions that provide wants. Examples include a taxi ride, hair cut or music concert
- **Specialization** a situation in which people produce a narrower range of goods and services than they consume. Specialization increases productivity; it also requires trade and increases interdependence.

VIRGINIA HISTORY AND SOCIAL SCIENCE STANDARDS OF LEARNING -2023

1.7	The student will explain the difference between goods and services and describe how people are consumers and producers of goods and services.		
2.8	The student will describe natural resources (water, soil, wood, and coal), human resources (people at work), and capital resources (machines, tools, and buildings).		
CE.11	The student will apply history and social science skills to analyze how economic decisions are made in the marketplace and in daily life by b. explaining the importance of innovation and productivity including the freedom to choose occupations, the role of technology and the development of human capital.		
CE.14	The student will apply history and social science skills to explain career opportunities and understand the fundamentals of personal finance by a. identifying the talents, interests, and aspirations that can influence career choice; b. identifying the attitudes and behaviors that strengthen the individual work ethic and promote career success; c. identifying human capital, abilities, intellectual and physical skills, work habits, and education and the changing supply of and demand for them in the economy.		

VIRGINIA STANDARDS OF LEARNING FOR ENGLISH

7.4 The student will read and determine the meanings of unfamiliar words and phrases within authentic texts. a) Identify word origins and derivations. b) Use roots, affixes, synonyms, and antonyms to expand vocabulary.

PROCEDURE:

- 1. Prepare and collect materials prior to class. Duplicate needed activity sheets. This activity can be done individually, in pairs, or in small groups.
- Introduce the lesson by showing the students the cover of What Do They Do with All That Poo? by Jane Kurtz. Explain that it takes many workers to keep zoo animals safe and clean.
- 2. Read the text to the students if time allows. This takes about 7 minutes. And YouTube read aloud can be fount here: https://www.youtube.com/watch?v=-MpD7auM56g
- 3. Display Visual 1, ZOO WORKERS: Human Resources. Read the content to the class. Emphasize the definition for Human Resource.
- 4. Review the terms prefix, suffix, and root words with the students:
 - Prefix a word part with a specific meaning at the beginning of a word
 - Suffix a word part with a specific meaning at the end of a word
 - Root Word the main part of a word that contains its core meaning
- 5. Ask the students if they think it would be difficult to work at a zoo. What would be the hardest part of cleaning up the animals and their cages?
- Display Visual 2, Creating Your Own Human Resource Human Resources at the Zoo. Read the content to the students. Keep Visual 2 displayed as students work on the activity.
- 7. Explain that they will be creating a new "human resource" using the word parts on the provided chart. Clarify that there are no right or wrong answers to the questions on the activity sheet and that creativity is encouraged.
- 8. Distribute the activity sheet, Creating Your Own Human Resource at the ZOO, selection devices and writing tools.
- 9. Allow students time to complete the sheet and encourage them to share their new "human resource" with the class. If time allows, discuss the possibility of any of these new professions have the possibility of becoming a reality in the future.

ZOO WORKERS: Human Resources

Zoo poo goes by many names, for example: manure, scat, droppings, dung, castings, and guano. Zoo workers, the human resources who remove and repurpose this waste material are hard workers who might like special names also.

Human Resource is defined as the quality and quantity of human effort directed toward producing goods and services.

Prefix-	Root Word	-Suffix
ZOO - (animal)	OLOGY (the study of)	-IST (person who does)



Example: A zoologist is a scientist who studies animals.

Although many of our words have been part of our language for many years, new words are added all the time. These new words are often created by using Latin and Greek word parts.



Visual 2-

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Human Resources at the Zoo

One of the jobs at the zoo is cleaning the animal cages. This person hoses the animal waste away each day.

A possilbe name for this job could be:

ACQUA (water) + PURG (clean) + IAN (a person who does) = Acquapurgian

Select one word part from each column to create a new word.

	Prefix-	Root Word	-Suffix
1	VAC- (empty)	GEO (earth)	-ANT (person who does)
2	TELE- (distant)	BROMOS (stench)	-ER (person who does)
3	EXO - (outside)	STERCUS (fertilizer)	-ESS (person who does)
4	HYPO- (beneath)	PYGO (rump)	-IAN (person who does)
5	ULTRA – (beyond)	SCAT (animal droppings)	-IST (person who does)
6	MULTI – (many)	EXCRETA (things moved out)	-OR (person who does)

Directions:

- Using a selection device, choose one word part from each column.
- Circle the selected word part.
- Combine these word parts to create a new human resource.
- Using the new word, answer the questions on the activity sheet.
- Be prepared to share information about your new human resource with the class.



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Activity Sheet-

Creating New Human Resources at the Zoo

Using a selection device, choose one word part from each column.

	Prefix-	Root Word	-Suffix
1	VAC- (empty)	GEO (earth)	-ANT (person who does)
2	TELE- (distant)	BROMOS (stench)	-ER (person who does)
3	EXO - (outside)	STERCUS (fertilizer)	-ESS (person who does)
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Directions: Using your newly created word, answer the following questions:

- 1. What is the name of this new human resource?
- 2. What skills does this human resource have?
- 3. Does this new human resource provide a good or service?
- 4. Could this human resource create a business and become an entrepreneur using these skills?