### GIGI WOLF, FEDERAL RESERVE BANK of KANSAS CITY

#### **LESSON DESCRIPTION:**

This lesson will introduce students to productive resources related to certain jobs and how human capital helps workers perform their jobs. Students will hear a story about a boy who visits a construction site at night and learns about the workers, equipment, and skills involved. Students will define natural, human, capital, and productive resources and match productive resources to specific jobs. Students will also distinguish between types of productive resources and identify human capital required for various employment. Additionally, students will work in collaborative groups to complete a 3-D art project while dividing their labor and applying specialized skills.

**Grade Level:** Pre-K-1

#### **CONCEPTS:**

Human capital, division of labor, employment, human resources, natural resources, capital resources, productive resources

#### **OBJECTIVES:**

Students will be able to:

- 1. Recall details from a story read aloud.
- 2. Define human, natural, capital, and productive resources.
- 3. Interpret sounds from the story with their bodies.
- 4. Categorize productive resources related to various jobs.
- 5. Distinguish natural vs. capital resources.
- Determine human capital for different employment.
- 7. Construct a 3-D art project as a team.
- 8. Apply a specialized skill set to an art project.

#### TIME REQUIRED:

60 minutes

#### **MATERIALS:**

- The Night Worker by Kate Banks (ISBN: 9780374400002)
- Visual 1: Productive Resources
- Visual 2: Tower Building Project
- Handout 1: Jobs and Resources
- Handout 1 Answer Key
- Handout 2: Decorator and Builder Cards
- Large marshmallows (1 bag per group)
- Popsicle sticks or wooden skewers (12 or more for each group)
- Empty toilet paper or paper towel cardboard tubes (same size and number per group)
- Essential art supplies glue, tape, scissors, crayons, markers, assorted construction paper, etc. (same items for each group)
- Miscellaneous art supplies stickers, beads, pipe cleaners, pom poms, foam shapes, decorative stick-on gems, stickers, etc. (roughly divided equally between each group)



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#### PREPARATION:

- Make copies of Handout 1: Jobs and Resources for every student.
- Cut apart Handout 2: Decorator and Builder Cards, with an equal number of builder and decorator cards, enough for each student to have one.
- Collect/purchase essential art supplies, divided equally into the number of collaborative groups.
- Collect/purchase miscellaneous art supplies, roughly divided into the number of collaborative groups.
- Collect/purchase large marshmallows, popsicle sticks/wooden skewers, empty toilet paper/paper towel cardboard tubes (equally divided into the number of collaborative groups).

Teacher note: There are no page numbers printed in the book, so you might number them before reading the story to the class, starting with the title page being page 1. Additionally, the second activity in the lesson requires students to work in collaborative groups, ideally four students per group. Consider the total number of groups when compiling the essential art and construction supplies so that each group receives an equal amount of all materials. The miscellaneous art supplies do not have to be equal and can roughly be divided between each group.

#### PROCEDURE:

- 1. Ask students to raise their hand if they have ever dreamed of working in a particular job.
- 2. Invite a few students who raised their hand to share their dream job.
- 3. Tell students that jobs are also called **employment**, or a way that someone earns a living.
- 4. Ask students if the employment ideas shared by the students are ones performed during the day or night.
- 5. Explain that you will read a story about people who work at night and that students should listen as you read to find out which jobs they are.
- 6. Begin reading *The Night Worker* by Kate Banks and stop after page 2.
- 7. Ask students to raise their hands if they heard a job that is performed at night.
- 8. Select a student to say the name of the job mentioned on page 2. (Answer: engineer)
- 9. Invite students to continue listening as you read for other jobs that happen during the nighttime.
- 10. Continue reading and stop after page 7.
- 11. Ask students to raise their hands if they heard other nighttime jobs mentioned.
- 12. Choose students to name the three jobs that were cited in the story. (Answer: street sweeper, delivery man, policewoman)
- 13. Continue reading until the end of page 9.
- 14. Ask students what sounds Alex heard at the construction site. (Answer: rattle and clang of heavy machinery)
- 15. Invite students to make rattle and clang sounds with only their feet.
- 16. Continue reading until the end of page 15.
- 17. Ask students which machine waved at Alex. (Answer: an excavator)
- 18. Invite students to "groan and rumble" like the excavator using only their voices.
- 19. Continue reading until the end of page 25.
- 20. Ask students what job Alex was doing just before break time. (Answer: helping to drive and empty the dump truck)
- 21. Invite students to whistle or make grinding sounds with only their hands.
- 22. Continue reading until the end of the story.
- 23. Ask students the following questions:
  - Why did Alex want to be a night worker? (Answers will vary, but may include that he wanted to be like his dad or to not have to go to sleep at night, etc.)
  - Which jobs in the story happen at night? (Answer: engineer, construction worker, construction foreman, police officer, street sweeper, delivery person)
  - What were Alex's dad and the other workers making at the construction site? (Answer: a building)



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- What equipment or tools did the workers use? (Answer: hard hats, flashlights, a project plan, bulldozer, excavator, cement mixer, concrete, crane, loader, dump truck)
- 24. Tell students that the equipment, materials, and people involved in employment within the story are also called **productive resources**, meaning they all are combined to make goods and services.
- 25. Explain that there are three types of resources that are included in the bigger bucket of productive resources, and they are called **natural resources**, **human resources**, and **capital resources**.
- 26. Share Visual 1: Productive Resources with students and review the definitions and examples provided from the story.
- 27. Tell students they will do an activity to match jobs with the productive resources used in those jobs and then determine which specific type of productive resource they are, either natural or capital.
- 28. Distribute Handout 1: Jobs and Resources to every student and ask them to take out a pencil for the activity.
- 29. Read the instructions aloud for Parts 1 and 2 of the activity.
- 30. Walk through each part of the handout with the class, having them complete it as you go.
- 31. Use the Handout 1: Jobs and Resources Answer Key as a guide for correct answers.
- 32. Ask students the following questions:
  - Do you remember what Alex's dad and the other workers were making at the construction site? (Answer: a building)
  - Why do you think all those workers were needed for that project? (Answers may vary but may include: the building was big or had lots of parts, everyone contributed something different to the project, different workers knew how to use certain equipment, etc.)
  - What skills do workers need to run a dump truck or an excavator or a crane? (Answers may vary but may include good eyesight, ability to drive, strength, knowledge about how each machine works, etc.)
- 33. Explain that the knowledge and skills that people get through education, experience, and training are called **human capital**.
- 34. Tell students that each worker in the story, from Alex's dad to the policewoman to the street sweeper, all have human capital that help them to perform their jobs.
- 35. Ask students what skills teachers need for their jobs. (Answers may vary but may include intelligence, a degree, organizational skills, speaking/presenting well, ability to read and write, knowledge about the subjects they teach, etc.)
- 36. Ask students what human capital architects need for their jobs. (Answers may vary but may include: a degree, math and measurement skills, drawing or designing ability, imagination, knowledge about different building materials and how they fit together, training about the equipment used for building, etc.)
- 37. Inform students that the classroom will now become a construction site and they will work in groups of four to build and decorate their own three-dimensional tower.
- 38. Tell students that just like in the story when the workers performed different tasks as part of a bigger project, they too will divide up the tasks for their tower project.
- 39. Share that when people complete one small part of a larger task when making a good or service, that is called **division of labor**.
- 40. Explain that the classroom construction site will also have a division of labor and that half the group will use their decorating or design skills and the other half will use their construction or building skills for today's project.
- 41. Display Visual 2: Tower Building Project and read the project instructions aloud.
- 42. Divide students into small groups, ideally in groups of four.
- 43. Randomly distribute Handout 2: Builder and Decorator Cards, cut apart in advance, ensuring an equal number of builders vs. decorators within each group.
- 44. Distribute the construction and art supplies, ensuring each group receives an equal amount of construction and essential art supplies and roughly an equal amount of miscellaneous art supplies.
- 45. Review instructions for the activity using Visual 2: Tower Building Project as needed.
- 46. Start a timer for 7 minutes and rotate around the room to answer any questions and assist groups as needed.

Teacher note: If desired, have students vote on their favorite tower and award the winning tower builders with verbal or another form of recognition. The completed towers can also be displayed in the classroom or a designated area of the school.



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#### ASSESSMENT:

Ask students the following questions:

- What human capital did you use to decorate and build your 3-D towers? (Answer: Decorating skills, construction skills, designing skills, imagination, ability to build things, etc.)
- What is it called when some workers complete one small part of a larger task? (Answer: Division of labor)
- What are productive resources? (Answer: Natural, human, and capital resources that are used to make goods and services)
- Which type of resources are made by people and used to make other goods and services? (Answer: Capital resources)
- What are examples of natural resources used for employment on a farm? (Answers may vary but may include sunlight, water, dirt/soil, animals, plants, etc.)

#### **EXTENSION:**

- Ask students to think about ways they can learn about different jobs and list them on the board.
- Have each student choose which one of the ideas they would like to try.
- Encourage students to use the method they chose to learn about one job in the next week with the help of a parent, guardian, or trusted adult.
- Additional ideas for construction projects are available at the following links. These can be substituted for the 3-D tower building project within the lesson, as appropriate for the students' aptitude.
  - o Little Bins Little Hands, <a href="https://littlebinsforlittlehands.com/">https://littlebinsforlittlehands.com/</a>.
  - Autodesk Instructables, <a href="https://www.instructables.com/projects">https://www.instructables.com/projects</a>
  - o Popular Mechanics, https://www.popularmechanics.com/home/how-to/g22/10-diy-toys-you-can-build-with-your-kids/
- Ask students to think about jobs or employment that happens at night vs. during the day.
- Discuss as a class the good things and the bad things about working at night.
- Invite students to think about why nighttime jobs are important within a community.

#### **COMMON CORE CONTENT STANDARDS:**

**ELA-Reading for Literature** 

Key Ideas and Details

- Grade K With prompting and support, ask and answer questions about key details in a text.
- Grade 1 Ask and answer questions about key details in a text.

**ELA-Reading for Information** 

Key Ideas and Details

- Grade K With prompting and support, ask and answer questions about key details in a text.
- Grade 1 Ask and answer questions about key details in a text.



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## VISUAL 1: PRODUCTIVE RESOURCES

**Natural Resources** – Things that occur naturally in and on the earth that are used to make goods and services.

Examples from story: Dirt/soil, mountain, gravel, stars







**Human Resources** – People who do mental and/or physical work to make goods and services.

Examples from story: Engineer, Alex, foreman, workers





**Capital Resources** – Things that are made by people and used to make goods and services.

Examples from story: Bulldozer, cement mixer, crane, dump truck







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**Productive Resources** – Natural, human, and capital resources that are used to make goods and services.

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# HANDOUT 1: JOBS AND RESOURCES (PAGE 1 OF 2)

**Part 1:** Match each human resource on the top with the productive resources on the bottom that are used in that job. Write the letter of the human resource next to each productive resource in the box provided.

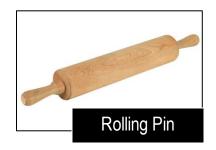


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# HANDOUT 1: JOBS AND RESOURCES (PAGE 2 OF 2)

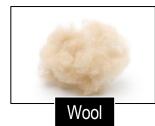
**Part 2:** Review each productive resource at the top of the page to determine if it is a natural (N) or capital (C) resource. Circle the correct letter, N or C, next to each resource at the bottom.

















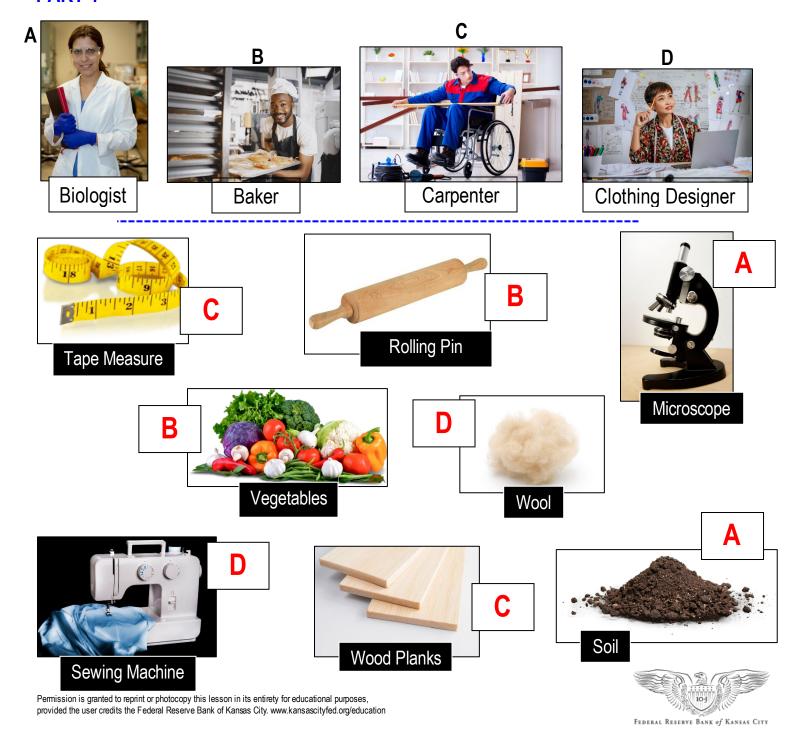
Sewing Machine	N	С	Tape Measure	N	С
Wood Planks	N	С	Soil	N	С
Vegetables	N	С	Rolling Pin	Ν	С
Wool	N	С	Microscope	N	С



### GIGI WOLF, FEDERAL RESERVE BANK of KANSAS CITY

## HANDOUT 1: JOBS AND RESOURCES ANSWER KEY

**Part 1:** Match each human resource on the top with the productive resources on the bottom that are used in that job. Write the letter of the human resource next to each productive resource in the box provided.

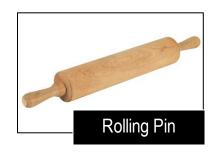


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## HANDOUT 1: JOBS AND RESOURCES ANSWER KEY

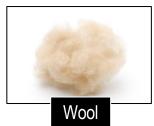
**Part 2:** Review each productive resource at the top of the page to determine if it is a natural (N) or capital (C) resource. Circle the correct letter, N or C, next to each resource at the bottom.

















Sewing Machine	N	C	Tape Measure	N	C
Wood Planks	N	С	Soil	N	С
Vegetables	N	С	Rolling Pin	N	C
Wool	N	С	Microscope	N	C



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## VISUAL 2: TOWER BUILDING PROJECT



On our construction site today, you will be part of a small group with the goal of building your own tower.

- 1. Within your group, half of you will decorate and the other half will design.
- 2. You will receive a Builder or a Decorator card and that will be your task.
- 3. All of you will receive supplies to help you apply your skills as a builder or a decorator.
  - a. Decorators, you will receive art supplies to make your tower colorful and unique.
  - b. Builders, you will receive construction materials to make your tower tall and strong.
- 4. Everyone should use their supplies to finish their tower before time runs out.
- 5. Each group will have 7 minutes to build your tower once you have your task card and supplies.
- 6. Remember to work together to build a tower that is as tall and colorful as it can be!



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## HANDOUT 2: BUILDER AND DECORATOR CARDS

Decorator	Decorator	Builder	Builder
			<i>Ş</i>
Decorator	Decorator	Builder	Builder
		8	8
Decorator	Decorator	Builder	Builder
		8	8
Decorator	Decorator	Builder	Builder
		8	8
Decorator	Decorator	Builder	Builder
		5	8
Decorator	Decorator	Builder	Builder
		8	8

