

Career Exploration Mosaic

Grade Levels: 6-12

Duration: 60 min

Students will create a mosaic that represents their current selves and future career aspirations, then explore careers and opportunities that align with their interests and goals.



Outline

Frame the Challenge	15 min total
Icebreaker	10 min
Introduce the Activity	5 min
Career Mosaic Activity	60 min total
Create the Mosaic	25 min
Share Out	10 min
Career Connections	25 min

Grade Levels: 6-12

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Concepts/Skills

Career exploration, Innovator Mindsets, self-reflection

Objectives

Students will:

- Reflect on their current interests, skills, and future aspirations.
- Identify commonalities they have with potential STEM careers.



Lab Connection:

Advanced Down the Drain
Sustainable Cities

These career exploration resources were developed in collaboration with [Santa Clara County Office of Education](#).

Materials and Preparation

□ [Educator Mosaic slides](#)

- Device to project Educator Mosaic slides

Materials vary depending on whether students will create physical or digital mosaics.

Digital Version <i>(each student will need)</i>	Paper Version <i>(each student will need)</i>
<ul style="list-style-type: none">□ Computer□ A copy of the Student Mosaic slides <i>(Available in English, Spanish, or Vietnamese)</i> <p>See the website for all of the resources for this lesson.</p>	<ul style="list-style-type: none">□ 16 paper or cardstock hexagons <i>(see Creating Physical Mosaics)</i>□ Pens/pencils□ Markers□ Transparent tape□ Device with internet access for career research



Creating Physical Mosaics

If you are having students make paper mosaics, they will each need a total of 16 hexagons in four different colors:

- A white hexagon (1 each) to describe themselves.
- Three other colors (5 each) for their career aspirations.

We recommend using hexagons as they have multiple edges. This can help students recognize that there are many potential career pathways they can take. Consider trying one of these options for making hexagons:

- Use a hexagon paper punch.
- Print the hexagons and have students cut them out.
- Cut out shapes using a cutting machine (e.g. Cricut or Silhouette).

If tools for creating hexagons are unavailable, this activity can also be done using sticky notes or other kinds of small, square pieces of paper or cardstock.

Preparation

1. Have the **Educator Mosaic slides** ready to project.
2. Consider where you will have students stand in a line for the [Icebreaker](#).
 - It may be useful to tape a line on the floor or push desks back for this activity.
3. Prepare the materials for the version of the activity you have chosen.
 - If students will make digital mosaics, create copies of the **Student Mosaic slides** for each student.
 - If students will create physical mosaics, see [Creating Physical Mosaics](#).
4. Choose the best option for share out(s) for you and your class.
 - Use **Educator slides 16, 20, and 23** to hold brief (2-3 min) share outs in between steps **OR**
 - Do one longer (10 min) share out after students have completed their mosaics.
5. Try the activity yourself with other educators or kids you know.
 - This will give you practice with the resources so you can anticipate student questions.
 - Prepare for discussions during the activity by reflecting on skill-building projects students have done and career exploration resources your school or district has access to.

Frame the Challenge



Icebreaker: (10 min) - Educator slides 4-8

1. Begin the activity by letting students know that they are going to be exploring their career aspirations today by thinking about their interests, skills, and dreams.
2. Let them know that they are going to begin by participating in an icebreaker called "Where Do You Stand."
 - Show them the warm-up prompt on *slide 3* - I like dessert.
 - Point out which parts of the room indicate yes, no or in the middle.
3. Ask students to stand up in a line and place themselves wherever they feel they best fit.
 - Have them take a moment to see where everyone decided to place themselves.
 - Ask follow-up question(s) from the slide to help students think deeper about what they like or are interested in.
 - **Example:** *What other food do you like instead?*
4. Continue this process with *slides 4-7*.
 - *In my free time, I prefer being... (indoors or outdoors)*
 - *I like to be creative. (yes or no)*
 - *Learning about different careers interests me. (yes or no)*
 - *When you think of the future, do you have a specific career in mind? (Yes, I want to be a... or I'm not sure)*
 - *When you think of the future, do you have a specific career in mind (Yes, I want to be a... or I'm not sure)*



Educator slides 4-8



Introduce the Activity: (5 min) - Educator slides 9-11

1. Show students *slide 9*. Lead a quick discussion by inviting students' to share what they think a **career** is.
2. By then end, students should be aware that:
 - A career can include one or many jobs throughout your lifetime and is shaped by various actions, decisions, and paths you take.
 - It is common for career interests to evolve, even into adulthood.
3. Let students know they will be creating a mosaic that represents their current interests, skills, and dreams for the future. They will then explore how this may connect to a variety of STEM careers.
4. Show them *slide 10*. Make sure that students are aware that:
 - This is time for them to reflect, brainstorm careers they might be interested in and consider what questions they have or what they want to learn more about.
 - They do not need to know exactly what they want to do in the future.
 - This activity is designed to help spark their thinking and begin a discussion that can inform their decisions later in life.
5. Show them the example mosaic on *slide 11*.
 - Emphasize that their mosaic can be organized into any shape they want. Everyone's mosaic may be different depending on their interests and goals.



Educator slides 9-11



Building a safe space for students

Students may be hesitant about sharing their personal interests and aspirations. Below are some tips to ensure students feel comfortable

- Be mindful of the dynamics of your class - while we always encourage learners to be bold and share-out, some students may benefit from individual reflection.
- Re-emphasize throughout the activity that there is no right, wrong, or better answer to any of the question prompts.
- Share your own career journey!






Career Mosaic Activity

Create the Mosaic: (25 min) - Educator slides 12-23 (Student slides 3-9)

1. Have students open the **Student Mosaic slides** on their computer for digital mosaics or pass out the paper hexagons, pens/pencils, markers and transparent tape to each student for physical mosaics (See [Creating Physical Mosaics](#)).
2. Show students *Educator slide 12 (Student slide 3)*.
 - Let students know that the white hexagon is about themselves.
 - Ask students to spend 3-4 minutes drawing and upload pictures to add to the hexagon that represents them.
3. Use the prompts and supports on *Educator slides 12-23 (Student slides 3-9)* to lead students through creating their digital or physical mosaic.
 - Make sure to indicate which color hexagons students should use for each category.



Educator Slides 12-23
(Student slides 3-9)

<p>Reflective tiles (Blue) Slides 12-14</p> 	<p>Students reflect current interests, skills, and other characteristics that are core to their identity, including:</p> <ul style="list-style-type: none"> • Their current interests. • Skills they have or would like to develop. • Characteristics that are important to them.
<p>Dream tiles (Yellow) Slides 16-18</p> 	<p>Students consider their future career dreams and goals. They don't have to be a specific goal, but rather different aspects of the future they imagine for themselves, including:</p> <ul style="list-style-type: none"> • What they hope to be doing. • What skills they think they will need. • What goals they hope to accomplish.
<p>Stepping Stones (Purple) Slides 20-21</p> 	<p>Students brainstorm questions they have and steps they can take in order to explore their interests and potential career pathways, including:</p> <ul style="list-style-type: none"> • Questions they have. • Places or events they could visit. • Things they could search for on the internet.

4. Have students connect their tiles (either digitally or using tape) to their centerpiece as they build their mosaic design.
5. *Optional:* Use slides 16, 20 and 23 to hold brief share outs in between steps (see [Guiding Questions](#)).



Group Collaboration




Consider putting students into groups so they can connect and share with each other as they create their tiles. Depending on how familiar your class is with you and each other, you may want to have students work in groups from the very beginning or just to brainstorm stepping stones. You may consider grouping students in one of the following ways:

- Common interests.
- Shared or similar future goals.
- Have students form their own groups.



Share Solutions (10 min)

1. If you are holding one larger class share out, bring the group back together and ask for volunteers to share their mosaics.
2. Ask **Guiding Questions** to help students reflect on each part of their mosaics:

Reflective Tiles (Blue) 	<ul style="list-style-type: none">• <i>What is an interest or skill you have now that you would like to carry into your future career?</i>• <i>Are there any skills you are interested in developing?</i>
Dream Tiles (Yellow) 	<ul style="list-style-type: none">• <i>What is something you hope to be doing or have in the future?</i>• <i>Why is this important to you?</i>
Stepping Stones (Purple) 	<ul style="list-style-type: none">• <i>When thinking of what your future career could be, what questions do you have?</i>• <i>What is an experience you would be most excited to participate in or opportunity you hope to have?</i>



Career Connections: (25 min)

1. Have students sit individually or in pairs at a computer if they are not already.
2. Ask them to spend about 15 min exploring some careers they may be interested in by exploring the career information sites [Gladeo](#) and/or [My Next Move](#).
 - If they do not have a specific career in mind, ask students to use the browsing features on each of the sites.
3. Encourage students to add tiles to their mosaics if they come across interests, skills, or future careers that inspire them.
4. After the 15 minutes are up, put the students into small groups of 2-3 and ask them to discuss what they have found.
 - *What careers did they explore and what did they learn?*
 - *What questions do they have when it comes to exploring careers further?*
 - *Where might they look to find these answers or who might they be able to ask?*



Lab Connection

Advanced Down the Drain, Sustainable Cities

If they are participating in one of these labs on a field trip to The Tech Interactive, let students know that during the lab, they will take on the role of someone in a specific career, collaborating with their peers to solve a design challenge.

Advanced Down the Drain

Students will be working together as **civil engineers** and **environmental technicians** to design and test new storm drains to keep trash from contaminating our watersheds.

Sustainable Cities

Students will step into the role of **city planners**, using a computer model to test their recommendations for a more sustainable city.

Before their field trip, have students review the [Careers in Sustainability profiles](#) related to the lab they will be participating in and discuss one or more of the following:

- What interests, skills, or goals do students notice they have in common with a career?
- What things surprised students about this career?
- What are students curious to learn about in the lab?

After their field trip, have students explore other careers in sustainability that were brought up or related to their lab experience and encourage them to iterate on their mosaics.



Tech Tips

See our [educator guides and videos](#) for more design challenge facilitation techniques.

- Innovator Mindsets Tech Tip

Standards Connections

California Career and Technical Education Standards California Standards for Career Ready Practice

Grades	Standard	Description
7-12	CTE 3.1	Career Planning and Management: Identify personal interests, aptitudes, information, and skills necessary for informed career decision making.
	CTE 3.2	Evaluate personal character traits, such as trust, respect, and responsibility, and understand the impact they can have on career success.
	CTE 3.4	Research the scope of career opportunities available and the requirements for education, training, certification, and licensure.

Vocabulary

For more tips on vocabulary and common engineering terms see our [Tech Tip: The Language of Engineering](#).

Term	Student-friendly definition
Career	A profession or chosen line of work, may include many jobs over their working life.
Mosaic	A decoration made by laying small pieces together