



## PUZZLE: CREATE A “GO FISH” CARD GAME USING CAREERS FROM THE NINE AG CAREER FOCUS AREAS

**STANDARDS & CONNECTIONS:** NGSS.3-5-ETSI, NGSS.MS-ETSI, CCSS.ELA-LITERACY.SL.9-10.4

**SUGGESTED MATERIALS:** Computer with Internet access, paper, colored markers/pens, scissors

**BACKGROUND:** There is a broad range of careers within the industry of agriculture. Agriculture has a variety and abundance of careers that fit within nine exciting career focus areas. Careers may have you using advanced equipment, creating new hybrid seeds, raising animals, managing people or designing new products and packaging. These nine areas include agribusiness systems, animal systems, biotechnology systems, environmental services systems, food products and processing systems, natural resources systems, plant systems, power, structural and technical systems, and agricultural education.<sup>1</sup>

**1. IDENTIFY:** Share the background information with the students, then share the puzzle to be solved. Determine constraints (e.g., time allotted, space, materials provided, etc.) and divide students into small groups.

**2. IMAGINE:** Ask a series of questions to help students brainstorm solutions to the puzzle. Encourage students to list all ideas – don’t hold back! Before moving on, make sure each group selects a solution that fits within the constraints.

- Ask: *How can you solve this puzzle? Which of your ideas can you build a prototype for given the constraints?*

**3. DESIGN:** Students diagram the prototype, identify the materials needed to build the prototype, and write out the steps to take. Students describe the expected outcomes.

- Ask: *What steps will you take to create your solution? What do you expect your solution to look like and be able to do?*

**4. CREATE:** Students follow their design plan and build their prototypes. Monitor their progress and remind them about how much time they have.

**5. TEST & IMPROVE:** Students evaluate their creation and compare it with the expected outcomes. Students seek areas of improvement and make changes where needed.

**6. SHARE:** Students share their solution to the puzzle and communicate lessons learned.

- Ask: *What was your biggest takeaway? What would you do differently?*

**ADDITIONAL RESOURCES:** For more background information on this topic, please visit [www.purpleplow.org](http://www.purpleplow.org).



Students can find a local citizen with a career in agriculture and job-shadow them for an afternoon!

<sup>1</sup> Ag Explorer. (2018). *Ag Explorer*. Retrieved from <https://www.agexplorer.com/>