

Estimated Length: 45 minutes Take Home: Yes Indoors, elective

### **Materials:**

Per camper

- Assortment of Perler beads
- 1/2 sheet of scrap paper
- Markers

Per Camp

- Perler bead peg board (10 per location)
- Parchment paper (1 roll per location)
- Iron (1 per location)
- Star Wars Characters Slideshow

## **Procedure:**

- Inform campers that the melting point of a substance is defined as the temperature at which a given solid will melt.
- 2. Campers can gather into small groups.
- 3. Within their group, have campers brainstorm the different Star Wars characters and what they look like.
- 4. Go through the slideshow to see what the crests look like and to see some examples of Perler bead crests
- 5. Using markers and a 1/2 sheet of scrap paper, make a paper replica of the Perler Pegboard available to you.
- 6. Draw out a design for your favourite Star

# Can You Design a Star Wars Character?

**Objective:** Create your own Star Wars character using patterning, a bit of heat, and creativity.

Wars character. Encourage patterning and planning!

- 7. Build your design on the Perler peg board.
- 8. **Senior extension:** Introduce a size limit or bead limit for an extra challenge.
- 9. Once you are satisfied with the pattern, very carefully carry your design over to the ironing area.
- 10. With the help of a counsellor or counsellor-in-training, cover the peg board and beads with a small square of parchment paper.
- Using an iron under direct supervision on the 'Linen Setting,' iron the parchment paper in small circular motions.
- 12. Lift the Parchment paper off the Perler Pegboard and set aside to cool.
- 13. Have campers clean up all supplies

## **Discussion:**

1. What role does heat play in this activity? Heating of the beads allows them to warm and then melt or stick together keeping your design intact without the use of the pegboard.

- 2. What happens if the iron is too cool? *The beads won't melt together and the beads will fall apart.*
- 3. Why do the beads melt even though the wax paper doesn't? What would happen if we put the iron at a very high temperature? *The beads and the wax paper have different melting points. The beads melt at a lower temperature than the wax paper. If we use a hotter iron, the wax paper might melt as well.*
- **Curriculum Links:**

Science and Technology (Understanding Matter and Energy)

Mathematics (Patterning and Algebra, Geometry and Spatial Sense)

#### Sources:

https://frugalfun4boys.com/2016/05/03/star-wars-perler-bead-patterns/

http://www.thekitchenmagpie.com/how-to-throw-a-simple-minecraft-birthday-party

STEM camp<sup>®</sup>

4. What are some other things that burn really easily? *Sugar*