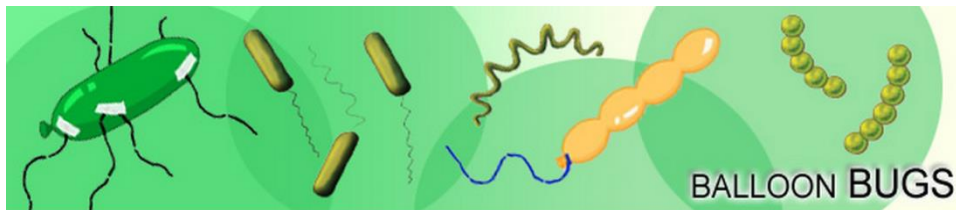


# Balloon Bugs

Make balloon bacteria models! Explore the shapes and structures of bacteria with different types of balloons and learn about their behaviors as disease-causing organisms.



## TEKS:

2.5A Classify matter by physical properties, including shape, relative mass and relative temperature, texture, flexibility, and whether material is a solid or liquid.

5.10A(rs) The student knows that organisms undergo similar life processes and have structures that help them survive within their environments.

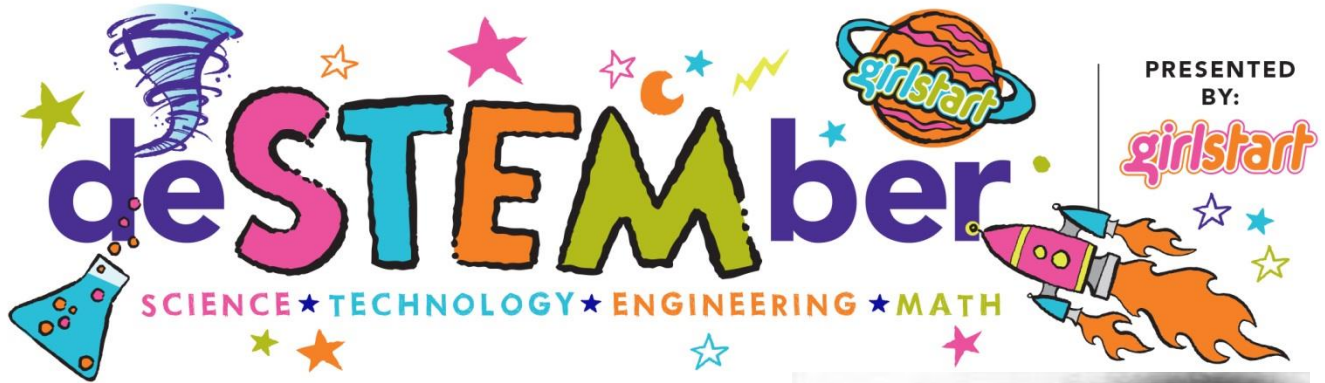
### Materials:

- Hole punch
- *Balloon bugs* presentation (download [here](#))
- Balloons of different shapes and sizes, in particular: round, sausage and squiggly shapes
- Balloon pump(s)- (optional)
- *Balloon bugs* instruction cards (download [here](#))
- Double-sided tape
- Permanent markers (various colors)
- Tags for labeling the bacteria (download [here](#))
- Pipe cleaners, string and/or yarn (to represent flagella)
- Rubber bands
- Scissors (to cut around the tags)

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## How To:

### How to make a *Campylobacter jejuni*:

1. Blow up one squiggly balloon and tie it off.
2. Create and attach the flagellum using a long piece of yarn, string, or pipe cleaner.
3. Complete and attach your nametag.



Photo: © B. Wren, London School of Hygiene & Tropical Medicine



Photo: © David Goulding, Wellcome Trust Sanger

### How to make a *Salmonella typhimurium*:

1. Blow up one long balloon and tie it off.
2. Use the tape to stick lengths of string, yarn or pipe cleaners to the balloon like flagella.
3. Draw markings on the side of the balloon.
4. Complete and attach your nametag.

### How to make a *Streptococcus pneumoniae*:

1. Blow up three small round balloons and tie off the ends. Try to make each balloon the same size as the next. Use small pieces of double-sided tape to stick the balloons end to end;  
**OR**
2. Blow up one long balloon and leave a little room in the end. Twist the balloon at regular intervals and hold in place with a rubber band.
3. Draw markings on the side of the balloons as in the picture.
4. Complete and attach your nametag.

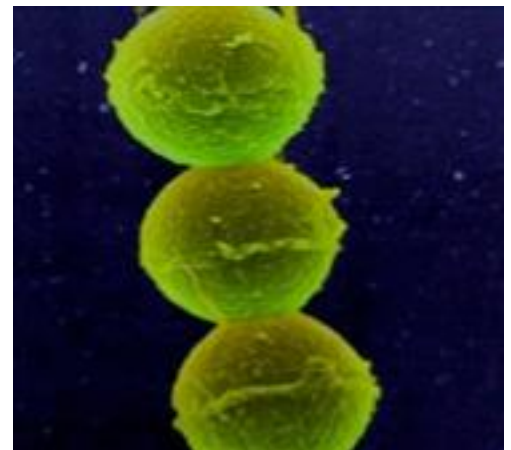


Photo: © MicroAngela. Original image from Rocky Mountain Laboratories, NIAID, NIH.

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