

**Title:** Let's Watch the Grass Grow!

**Author:** Jennifer Smith, 1<sup>st</sup> grade, EDUPRIZE- Queen Creek

**Level:** Grades K-2

**Subjects:** English language arts, Science

**AZ Academic Standards:** K/1/2.SL.1, K/1.L.4, SC00-S1C1-01, SC00-S1C4-01, SC00-S4C3-01/2, SC01-S1C2-04, SC01-S1C4-01, SC01-S4C3-01, SC02-S1C2-02/3/4, SC02-S1C4-01

**Brief Description:** After sharing background knowledge about turf/sod and reading a letter from one of our Arizona sod growers, kids will watch a video about how turf grass is made. Students will discuss what they've learned and then make their own Sammy Sod and watch the "hair" grow. (Side note: The terms grass, sod, and turf are all interchangeable within this lesson for sake of ease.)

**Objectives:**

- ☐ Students will be able to discuss various uses for sod/turf.
- ☐ Students will be able to identify the needs of grass to survive and thrive.
- ☐ Students will be able to apply knowledge of grass needs in growing their own sod.

**Estimated Teaching Time:** 1 hour (plus additional 15 minute sessions to monitor grass growth over time)

**Materials:**

- ☐ Letter from Bob Flake to students about running a sod farm (attached PDF)
- ☐ Answers to student questions from Bob Flake (attached PDF)
- ☐ Interesting sod facts (attached PDF)
- ☐ Video: How It's Made Turf Grass:  
[https://www.youtube.com/watch?v=h\\_LHUzdzGaQ](https://www.youtube.com/watch?v=h_LHUzdzGaQ)
- ☐ cups or containers for planting (one for each student)
- ☐ tray to hold containers
- ☐ potting soil
- ☐ toy shovel or measuring cup
- ☐ 2 varieties of grass seed
- ☐ water
- ☐ watering can or water spray bottle
- ☐ craft sticks
- ☐ permanent marker
- ☐ ruler
- ☐ googly eyes, pom-poms, etc (anything to decorate Sammy Sod's face)

**Vocabulary:** (all synonyms for the sake of this lesson)

- **grass:** vegetation consisting of typically short plants with long narrow leaves, growing wild or cultivated on lawns and pasture, and as a fodder crop.
- **sod:** the surface of the ground, with the grass growing on it. (a piece of this, usually sold in rolls and used to start a new lawn, athletic field, etc.)

- **turf:** a piece of grass and the surface layer of earth underneath it, cut from the ground.

### **Supporting Information:**

- Please see attached Sod Facts.

### **Procedures:**

1. Start by asking your students what they think of when you say the word grass. What could they say using their sense of sight (color)? Sense of smell (any memories)? Sense of hearing (lawnmower)? Sense of touch (soft, prickly)? Sense of taste (anyone tried wheatgrass shots)?
2. Let students know that today they are going to learn about grass in a way that maybe they hadn't thought of it before. It's called sod or turf.
3. Share with students that there are farmers right here in Arizona who grow grass as a crop. They harvest it and sell it just like other farmers harvest and sell vegetables and fruits.
4. Read the letter from Bob Flake- Farm to Football. Tell students to be thinking of any questions they might have for Bob that he doesn't answer in his letter. (An extension activity could be to write letters to Bob containing the kids' questions.)
5. Then share some/all of the questions and answers that other students had in his Farm to Football Flake Response.
6. Next, share the How It's Made Turf Grass video with students.
7. Have students share with a partner, then with the group, something new they learned today about grass/sod/turf. Ask students what they noticed that the grass needed to survive and thrive. (soil, sunlight, air, water, fertilizer, mowing, care from the farmer)
8. Finally, tell the kids that today everyone will be making their own Sammy Sod.
9. Assembly steps:
  - a. Fill up containers  $\frac{3}{4}$  of the way with potting soil.
  - b. Have each student select which type of grass seed they think will grow better.
  - c. Sprinkle grass seed on top of the soil... the more you sprinkle, the more grass will grow. No need to cover with soil, but you can if you'd like to.
  - d. Water the soil with the spray bottles- no need to drench the soil.
  - e. Write each student's name on a craft stick and also note in some way which grass seed they selected to grow.
  - f. Place the marker inside their container.
  - g. Have kids give Sammy Sod a face using googly eyes, pom-poms, etc.
  - h. Separate the two different seed groups so students can easily see growth over time and which variety does better.
  - i. Don't forget to water periodically. Keep damp at first until grass sprouts and then after rooted, water when the top soil is dry to the touch.

- j. With older students a fun extension is to measure and graph grass height over time to see which grass grew taller.
- k. Recommendation: place each Sammy inside its own plastic Ziploc bag when first planted... this will act as a greenhouse retaining heat and moisture until seeds sprout. Remove from bag once seeds have sprouted.

**Evaluation Options:**

- ☐ Have students discuss various uses for sod.
- ☐ Have students explain what sod needs to survive and thrive.

**Extensions and Variations:**

- 1. Bring in a bottle of wheatgrass for sampling.
- 2. Instead of creating a Sammy Sod, follow same steps but attach a picture of the student's face to the container.



**Resources:**

- 1. Cedar Ridge Sod, Bob Flake's Sod Farm: <http://cedaridgesod.com/>
- 2. Book idea for young children: In the Tall, Tall Grass by Denise Fleming