



## Moving Soybeans Vocabulary Tag [Language Arts]

### Objectives:

1. Students will develop an understanding of how harvested soybeans are moved and stored.
2. Students will be able to define terms related to grain storage and transportation.

### Common Core Standards:

- RI.4.1 Refer to details and examples in the text when explaining what it says explicitly and when drawing inferences from the text.
- RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
- RF.4.4 Read with sufficient accuracy and fluency to support comprehension.
- L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.

### Materials Needed:

- computer and projector to show Pod to Plate Video Episode V – “Trucking” (available online at [www.podtoplate.org](http://www.podtoplate.org))
- vocabulary list Pod to Plate Video Episode #5 – “Trucking”
- vocabulary charts (see Procedure for number of copies of each chart needed)
- large playing area, preferably outdoors
- cones to mark boundaries of playing area
- *Moving Soybeans* matching worksheet

Note: This lesson correlates closely with Pod to Plate video lessons *How to Store a Billion Beans*, *Soybean Math by the Bushel*, and *Soybean Ads by the Truckload*.



**Procedure:**

1. Show and discuss Pod to Plate Video Episode V - "Trucking." Review key vocabulary heard in the video and defined in the vocabulary list.
2. Explain Vocabulary Tag game to students: Half of the students in the class will be "it." Students who are "it" will carry a vocabulary list including eight terms and their definitions. As there are 15 total vocabulary terms, there are two different charts with one word repeated. For example, if there are 24 students in the class, six students will have one chart, six more will have another, and the remaining 12 will not have a chart.
  - a. The object of the game is to not become "it." The better you remember the vocabulary words, the less likely you are to become "it."
  - b. If playing outdoors: Students who are "it" run to try to tag students who are not "it." A student is tagged if a student who is "it" comes within ten feet of a student who is not "it" and calls that child's name. When tagged, the student must stop so the child who is "it" can read aloud a definition from his or her chart. If the tagged student can say the vocabulary term the definition describes correctly, he or she continues on without becoming "it." If the student is incorrect or cannot come up with an answer, he or she is told the correct answer and then must take the vocabulary chart and becomes "it."
  - c. If playing indoors: Students who are "it" walk quickly to try to tag students who are not "it." A student is tagged if a student who is "it" lightly touches (no hitting) a student who is not "it" on the upper arm or shoulder. When tagged, the student must stop so the child who is "it" can read a definition from his or her chart. If the tagged student can say the vocabulary term that the definition describes correctly, he or she continues on without becoming "it." If the student is incorrect or cannot come up with an answer, he or she is told the correct answer and then must take the vocabulary chart and becomes "it."
  - d. Students who do not stop to read a definition after being tagged can be sent to "jail" by the teacher. While in jail, students may review the vocabulary chart until being released by the teacher. (Students who cannot run due to injuries or health issues can be assigned the duty of "sheriff" and sit next to the jail to quiz inmates on the vocabulary terms.)



[www.podtoplate.org](http://www.podtoplate.org)

Grade Level: 4<sup>th</sup>-5<sup>th</sup> grade

- e. The game may continue as long as time allows. Proficiency with the terms will increase as the game progresses.

**Evaluation:**

- Have students complete the *Moving Soybeans* matching activity worksheet.





## Vocabulary List for Pod to Plate Video Episode #5 – Trucking

**auger** – a large screw within a cylinder or pipe, used to force material such as grain from one end of the pipe to the other

**bin** – large, cylindrical steel building in which grain crops such as corn or soybeans are stored; also known as a grain bin

**bucket elevator** – mechanism found within an elevating or grain leg; a series of connected rectangular buckets which scoop grain out of an underground pit and lift it up to be dumped into pipes leading to storage bins

**conveyor** – machine or mechanism with a moving belt on which material is moved from one place to another; conveyor belt

**dump** – to unload material using gravity, as from the bottom of a grain truck or wagon

**fuel** – materials such as wood, coal, or gas which are burned to produce heat or power

**hopper** – container with a tapered opening at the bottom which allows contents to be emptied out using gravity

**storage** – place to hold or store a product until it is needed

**tarp** – short for “tarpaulin,” a heavy cloth or vinyl cover used to cover and protect items from rain or sun

**truck** – term used to describe a tractor and trailer used to haul products such as harvested crops; also known as a semi-trailer or tractor-trailer

**truck scale** – a large scale mounted on a cement foundation allowing trucks to drive onto a platform to be weighed

**yield** – amount of something produced; used to describe the amount of crops produced, i.e., “soybean yield”

### Bonus terms

**market** – place where a product such as crops might be bought or sold

**processing** – a series of actions meant to change and/or preserve a material, i.e., processing soybeans to make vegetable oil

**scale ticket** – a written document or paper filled out at the grain elevator and provided to the farmer who has delivered the grain; a receipt which proves how much grain was delivered



### Moving Soybeans Vocabulary Chart #1

<b>auger</b>	a large screw within a cylinder or pipe, used to force material such as grain from one end of the pipe to the other
<b>bin</b>	large, cylindrical steel building in which grain crops such as corn or soybeans are stored; also known as a grain bin
<b>bucket elevator</b>	mechanism found within an elevating or grain leg; a series of connected rectangular buckets which scoop grain out of an underground pit and lift it up to be dumped into pipes leading to storage bins
<b>conveyor</b>	machine or mechanism with a moving belt on which material is moved from one place to another; conveyor belt
<b>dump</b>	to unload material using gravity, as from the bottom of a grain truck or wagon
<b>fuel</b>	materials such as wood, coal, or gas which are burned to produce heat or power
<b>hopper</b>	container with a tapered opening at the bottom which allows contents to be emptied out using gravity
<b>storage</b>	place to hold or store a product until it is needed



### Moving Soybeans Vocabulary Chart #2

<b>tarp</b>	short for “tarpaulin,” a heavy cloth or vinyl cover used to cover and protect items from rain or sun
<b>truck</b>	term used to describe a tractor and trailer used to haul products such as harvested crops; also known as a semi-trailer or tractor-trailer
<b>truck scale</b>	a large scale mounted on a cement foundation allowing trucks to drive onto a platform to be weighed
<b>yield</b>	amount of something produced; used to describe the amount of crops produced, i.e., “soybean yield”
<b>market</b>	place where a product such as crops might be bought or sold
<b>processing</b>	a series of actions meant to change and/or preserve a material, i.e., processing soybeans to make vegetable oil
<b>scale ticket</b>	a written document or paper filled out at the grain elevator and provided to the farmer who has delivered the grain; a receipt which proves how much grain was delivered
<b>bucket elevator</b>	mechanism found within an elevating or grain leg; a series of connected rectangular buckets which scoop grain out of an underground pit and lift it up to be dumped into pipes leading to storage bins



## Moving Soybeans Vocabulary Matching Exercise

**Directions: Draw lines to connect the terms with their definitions.**

<b>auger</b>	machine or mechanism with a moving belt on which material is moved from one place to another; conveyor belt
<b>bin</b>	container with a tapered opening at the bottom which allows contents to be emptied out using gravity
<b>bucket elevator</b>	a large scale mounted on a cement foundation allowing trucks to drive onto a platform to be weighed
<b>conveyor</b>	large, cylindrical steel building in which grain crops such as corn or soybeans are stored; also known as a grain bin
<b>dump</b>	a large screw within a cylinder or pipe, used to force material such as grain from one end of the pipe to the other
<b>fuel</b>	term used to describe a tractor and trailer used to haul products such as harvested crops; also known as a semi-trailer or tractor-trailer
<b>hopper</b>	short for “tarpaulin,” a heavy cloth or vinyl cover used to cover and protect items from rain or sun
<b>storage</b>	to unload material using gravity, as from the bottom of a grain truck or wagon
<b>tarp</b>	place to hold or store a product until it is needed
<b>truck</b>	materials such as wood, coal, or gas which are burned to produce heat or power
<b>truck scale</b>	amount of something produced; used to describe the amount of crops produced, i.e. “soybean yield”
<b>yield</b>	mechanism found within an elevating or grain leg; a series of connected rectangular buckets which scoop grain out of an underground pit and lift it up to be dumped into pipes leading to storage bins



### Moving Soybeans Vocabulary Matching – ANSWER KEY

Directions: Draw lines to connect the terms with their definitions.

<b>auger</b>	machine or mechanism with a moving belt on which material is moved from one place to another; conveyor belt
<b>bin</b>	container with a tapered opening at the bottom which allows contents to be emptied out using gravity
<b>bucket elevator</b>	a large scale mounted on a cement foundation allowing trucks to drive onto a platform to be weighed
<b>conveyor</b>	large, cylindrical steel building in which grain crops such as corn or soybeans are stored; also known as a grain bin
<b>dump</b>	a large screw within a cylinder or pipe, used to force material such as grain from one end of the pipe to the other
<b>fuel</b>	term used to describe a tractor and trailer used to haul products such as harvested crops; also known as a semi-trailer or tractor-trailer
<b>hopper</b>	short for "tarpaulin," a heavy cloth or vinyl cover used to cover and protect items from rain or sun
<b>storage</b>	to unload material using gravity, as from the bottom of a grain truck or wagon
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