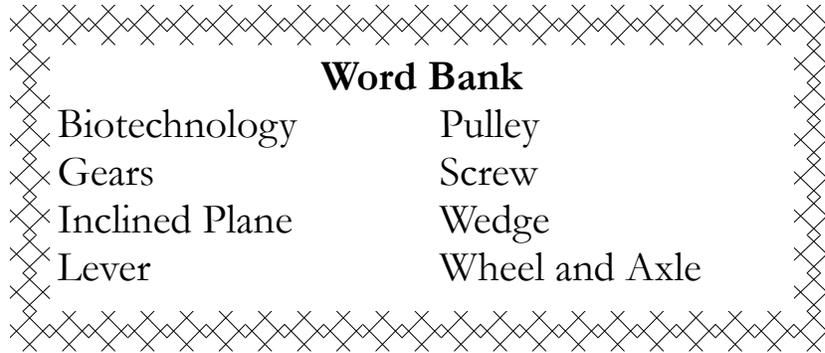


Technology Ag Mag - Vocabulary

Directions: Read each item. Choose the word from the word bank that would best complete the sentence. Place the word on the line provided.



1. A(n) _____ changes the direction of the force applied and makes work easier.
2. A(n) _____ is an inclined plane rolled up. It concentrates the force applied on an object to a smaller area.
3. A(n) _____ spreads the amount of work needed to move an object over a larger distance so that less force is needed at any particular moment.
4. _____ is the process of using biology to create, improve, or modify plants, animals, and microorganisms.
5. A(n) _____ allows a weight to be moved a short distance with a concentrated amount of force.
6. A(n) _____ is two inclined planes attached to each other. They make work easier by splitting something when force is applied.
7. _____ are wheels with teeth. The teeth of one wheel turns another. They are used to increase or decrease speed and power.
8. A(n) _____ reduces the amount of friction an object creates during its motion.

Technology Ag Mag - Math - Multiplying and Dividing

Directions: Choose the best answer.

1

If a company sells a combine with heads for \$409,000, how much would it cost to buy 3 combines with heads?

- A \$136,333
- B \$1,227,000
- C \$412,000
- D \$3,627,000

2

If I buy a 16-row planter for \$126,000, and 2 round balers for \$27,000 each, how much did I spend?

- A \$153,000
- B \$99,000
- C \$180,000
- D \$213,000

3

If I spend \$254,000 on a 5-shank ripper, which costs \$34,000, and a tractor, how much did the tractor cost?

- A \$288,000
- B \$7,470
- C \$176,320
- D \$220,000

4

If I have \$216,000 to spend, how many 5-shank rippers can I buy if each one costs \$34,000?

- A 4
- B 6
- C 8
- D 9

Technology Ag Mag - Math - Multiplying and Dividing**Directions:** Choose the best answer.**5**

If a field cultivator costs \$41,000, how much would it cost a farmer to buy 4 of these.

- A** \$41,000
- B** \$82,000
- C** \$123,000
- D** \$164,000

6

In order to get his field planted, a farmer decides to buy 2 16-row planters at \$126,000 each and 2 5-shank rippers at \$34,000 each. How much does the farmer spend?

- A** \$150,000
- B** \$320,000
- C** \$194,000
- D** \$286,000

7

A farmer spends \$450,000 on a combine with head that costs \$409,000 and a field cultivator. How much does the field cultivator cost?

- A** \$41,000
- B** \$31,000
- C** \$859,000
- D** \$410,000

8

Three tractors cost \$660,000. How much does each tractor cost?

- A** \$220,000
- B** \$120,000
- C** \$320,000
- D** \$420,000

Technology Ag Mag - Reading Passage

All Around the Farm

Taken from writing of the John Deere Company

A tractor is one of the most important machines on a farm. Tractors come in different sizes so farmers can choose the right tractor for the job. For a big farm, farmers might choose a huge twelve-wheel tractor with lots of power. For a fruit farm, they might choose a small tractor that can drive through narrow rows of fruit trees. Parts of a tractor include a back window which opens to let fresh air into the cab where farmers sit to drive. The cab is up high so the farmer has a good view of the fields. A powerful engine lets the tractor pull heavy equipment up steep slopes. Big rear tires with heavy treads and deep grooves keep the tractor from getting stuck in the mud while smaller front tires make turning the tractor easy. Headlights allow the farmers to work at night or in rain or fog.

There are lots of different kinds of attachments a farmer can use with a tractor. Some are attached to the front of the tractor and some to the back. All the attachments get their power from the tractor. One attachment is a disk. The disk breaks up hard soil with heavy blades to get the field ready for planting. Another attachment is a seed drill which the tractor pulls behind it. The seed drill makes holes in the soil and then drops seeds deep into them. Then it covers the holes with dirt.

A tractor can also pull a baler. A baler collects hay from the field and wraps it into bales to make moving the hay easier. The bale fork attaches to the front of the tractor. It is used to lift and carry the bales of hay. When a sugar beet harvester is attached to a tractor, it separates the leaves and the stalks from the roots of the sugar beet. The roots are sent to factories to make sugar. One last attachment used is a mower. Cutting the tall grass is easy when a tractor pulls a mower. So, as you can see, the tractor plays an important role on the farm.

Directions: Read each item. Choose the word that best fits in the blank.

1

What type of writing is this passage?

- A Narrative
- B Expository
- C Persuasive
- D Fiction

2

What is this passage mainly about?

- A The importance of a tractor on a farm.
- B Types of farming equipment.
- C Life on the farm isn't easy.
- D The work of a farmer .

Technology Ag Mag - Vocabulary

Directions: Read each item. Choose the word that best fits in the blank.

3

The purpose of a baler is to _____.

- A Harvest corn.
- B Harvest hay.
- C Harvest soybeans.
- D Harvest wheat.

4

What tractor attachment is used to drill a hole, plant a seed, and cover it over with dirt?

- A Tractor
- B Seed Drill
- C Disk
- D Mower

5

What is the purpose of a disk attached to the tractor?

- A To cut hay and wrap it into bales.
- B To make holes in the soil and plant a seed.
- C To break up the hard soil with heavy blades.
- D To mow grass.

6

Why is the cab high up on top of a tractor?

- A So the farmer is above the engine.
- B So the farmer is close to the window.
- C So the farmer can always see his or her house.
- D So the farmer has a good view of the fields.

Extended Response

How does technology impact agriculture? Be sure to discuss how improvements in machinery have made an impact on farming. Include your own knowledge about how technology has improved your life as well.