



## ***Fantastic Farm Machines***

### 2010 Wisconsin Farm Bureau-Ag in the Classroom's Book of the Year

The Wisconsin Farm Bureau Foundation and Wisconsin Farm Bureau – Ag in the Classroom Program presents a companion lesson and activity booklet for the 2010 Book of the Year. Order forms for the book can be found by visiting [www.wisagclassroom.org](http://www.wisagclassroom.org)

### **Answer Key and Wisconsin Model Academic Standards for 4<sup>th</sup> grade students**

#### **Fantastic Farm Machines- Crossword**

Across: 1- Tractor; 4- Irrigation pivot; 6-Skid steer; 7- Soil finisher; 8- Chisel plow; 9- Grain drill; 10- Crop sprayer

Down: 2- Corn planter; 3- Combine; 5- Mower conditioner; 6- Spreader

English	A.4.4	D.4.1	F.4.1				
Social Studies	B.4.1	G.4.1	G.4.2	G.4.3	G.4.4	G.4.5	H.4.1

#### **Fantastic Farm Machines- Word Search**

English	D.4.1	E.4.1	F.4.1
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#### **Fantastic Farm Machines- Worksheet**

Matching: 1- D; 2- E; 3- A; 4- J; 5- I; 6- B; 7- H; 8- G; 9- C; 10- F

Definitions: *Haylage*- damp hay that is cut into small pieces, looks like grass clippings, can be dumped in gigantic piles, later it is packed down and covered with white plastic to be saved for winter feeding.

*Manure*-waste product from animals like cows, pigs and horses, spread onto fields and enriches the soil and helps crops to grow.

Science	G.4.4	G.4.5			
English	A.4.2	A.4.4	B.4.1	B.4.2	B.4.3

#### **Fantastic Farm Machines- Brands of Machinery**

Some of the brands shown in the book include: John Deere, Case International, Ag Gator, Van Dale and Case.

Machinery companies have gone through major changes of ownership by purchasing each other so it may be a little confusing finding some of the bands in the book on the Internet. Also certain models of equipment may be taken out of production as new ones are developed. Use the following links to assist in your search. Most have a section that talks about the company history, careers and will offer links to visit the various types of equipment they make.

- [http://www.deere.com/en\\_US/deerecom/usa\\_canada.html](http://www.deere.com/en_US/deerecom/usa_canada.html)
- <http://www.caseih.com/index.aspx>
- [http://www.agcocorp.com/products/products\\_brand.aspx](http://www.agcocorp.com/products/products_brand.aspx)
- Van Dale- may have a hard time finding websites for this manure spreader
- <http://www.cnh.com/wps/portal/cnhportal>

Science	G.4.1	G.4.5					
English	A.4.2	A.4.4	B.4.1	B.4.2	B.4.3	E.4.1	F.4.1

### **Fantastic Farm Machines- Model Farm Equipment**

Answers will vary depending on the pieces of equipment brought in.

Science	C.4.3	C.4.8	G.4.4	G.4.5	H.4.1	
English	A.4.4	C.4.1	C.4.2	C.4.3	E.4.1	F.4.1

## **Additional activities, websites and discussion points**

**Websites to visit:** This is just a partial listing of various brands of equipment websites and not an endorsement of any particular one. There are many more to be explored by searching “farm equipment” or “farm machinery”.

[www.kidsfarm.com/equipment.htm](http://www.kidsfarm.com/equipment.htm)

[www.deere.com](http://www.deere.com)

[www.caseih.com](http://www.caseih.com)

[www.fabco.com](http://www.fabco.com)

[www.gehl.com](http://www.gehl.com)

[www.agcocorp.com](http://www.agcocorp.com)

[www.antiquefarming.com/history.html](http://www.antiquefarming.com/history.html)

[www.mccormickusa.com](http://www.mccormickusa.com)

[www.kuhnknight.com](http://www.kuhnknight.com)

### **Other websites with information about machinery and equipment:**

- [www.agclassroom.org/gan](http://www.agclassroom.org/gan) - Growing a Nation – Classroom Resources, Instructional Unit, Prosperity & Challenges, Lesson 3, 1950-1969
- [www.cfaitc.org](http://www.cfaitc.org) (click on Lesson Plans, Grades 2-5, Simple and Complex Machines Used in Agriculture)
- <http://inventors.about.com/library/inventors/blfarm1.htm> - About Inventors.com
- [http://www.agintheclassroom.org/060605/Teachers/Printable/agmags/ag\\_mags.html](http://www.agintheclassroom.org/060605/Teachers/Printable/agmags/ag_mags.html) - Illinois Ag Mag - Technology
- <http://www.need.org/needpdf/Biodiesel.pdf> - *Transportation and Biofuels*- Biodiesel curriculum for 4-12 grades.
- [www.agclassroom.org](http://www.agclassroom.org) – click on National Resource Directory
- [www.farmcity.org](http://www.farmcity.org) – *Tractor Power* booklet available from National Farm City Council, Inc
- <http://www.mda.state.mn.us/kids/maitc/bookbundle/>- Minnesota Agriculture in the Classroom – Book Bundle Reader Guide- *Fantastic Farm Machines*-

## **Other supplemental activities and discussion points**

1. If there are students from a farm, what types of machines and equipment do they have on their farm? How are the machines used? Are they allowed to operate any of the machines or equipment? If so, what safety rules must they follow?
2. There are some historical pictures in the book, how has equipment and machinery changed over the years?
3. Invite a farmer (or a panel of farmers) to come into the classroom to discuss the machines and equipment they have on their farm.
4. If possible, could some machinery be brought to school for an "equipment fair" so students can learn about them, see the size of some equipment, and understand the safety rules associated with them.
5. If you have an equipment dealer in the area, could a field trip to the dealership be arranged? In addition to the tour, have the staff discuss their jobs, possible career areas, and their responsibilities.
6. After identifying the various pieces of equipment, discuss safety rules when around farm equipment. A farmer or equipment dealer would be an excellent presenter. You can also check out farm safety information at <http://www.fs4jk.org/>, <http://fyi.uwex.edu/agsafety/>, <http://www.marshfieldclinic.org/NCCRAHS/>, and other Internet sources.
7. The book shows many types of technology and computers used on farm equipment and machinery. Discuss how farmers used computers, GPS and other forms of technology.
8. To include math into the discussion, research into the cost of some of the farm equipment and machinery could be done. There are many on-line machinery sales websites or an equipment dealer would be a good resource. Depending on the grade level, simple problems with figuring interest, payments and inventory could be done.
9. One section discusses irrigation. Do we use irrigation in Wisconsin? Where and on what types of crops and soils? Have students ever seen an irrigation system in use?
10. Contact your county Farm Bureau ([www.wfbf.com](http://www.wfbf.com)) to see what other Ag in the Classroom or safety activities they offer that could be included in your classroom.

## **About the author, Cris Peterson**

Source: book jacket and [www.boydsmillpress.com](http://www.boydsmillpress.com)

Since 1989, Cris Peterson has been writing Huckleberry Bookshelf, a weekly children's book review as well as a family literacy column that is nationally syndicated with Universal Press Syndicate. It appears in papers nationwide, including the St. Paul Pioneer Press, the Dallas Morning News, the Milwaukee Journal, and the Omaha World-Herald. She is the author of several children's books and was named 2004 National Dairy Woman of the Year at the World Dairy Expo to honor her writing and her leadership in the agricultural business.

A native of Minneapolis, she is a University of Minnesota honors graduate with a BS in history and geography. Familiar with the harried and hectic schedule of a working parent, Cris focuses most of her time, energy, and writing on kids, cows, and history. She is a full-time dairy farmer with her husband, Gary. They farm one thousand acres in Grantsburg, Wisconsin, milk five hundred cows, and keep busy with their three children. Cris often contributes material to Highlights for Children. Her first story published in the magazine received the Pewter Plate Award for author of the month in October 1989. She has also written articles and features for various magazines and newspapers, including Cricket, the Atlanta Constitution, the Chicago Tribune, the Milwaukee Journal, the Des Moines Register, and Country Today. A frequent speaker about writing, reading, history, and farming, Cris has written Extra Cheese, Please! a book that features photographs of the Peterson's own dairy operation and tells the story of cheese's journey from cow to pizza. Harvest Year is the title of her second photo essay.