

Tops and Bottoms

By: Janet Stevens

Activity Level: Intermediate

PURPOSE

Students will complete language arts activities enjoying this quality children's literature while also gaining an understanding of agriculture that surrounds us in Nebraska and feeds people (and animals!) near and far.

NEBRASKA STATE EDUCATION CONTENT STANDARDS CONNECTION

LA.3.V.1 | LA.4.V.1.

Determine or clarify the meanings or pronunciations of words using reference materials and classroom resources.

LA.3.RI.1 | LA.4.RI.1

Determine the central idea of an informational text and how it is conveyed through key details.

LA.3.RP.5 | LA.4.RP.5

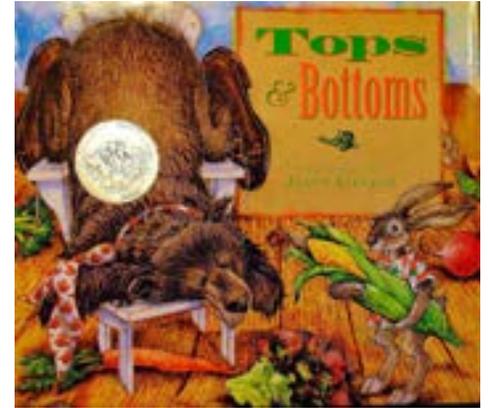
Compare and contrast the treatment of similar themes and topics and patterns of events in literary texts by different authors or from different cultures.

WHAT'S THE CONNECTION TO AGRICULTURE?

Bear's lack of awareness of crops leaves him with nothing but waste when clever Hare tricks Bear out of the important part of the plant, which he changes each season to continue to trick Bear! In commercial agriculture, landlords and tenants have a responsibility to communicate with each other about the terms of their agreements about land rent: will the tenant pay the landowner with money? Or with a share in the harvest? What are the landowner's responsibilities?

MATERIALS

- Copy of *Tops and Bottoms* by Janet Stevens for reading aloud to class
- Print-outs of Land Rent Contract, enough for each student (unless projecting on a wall/screen/smartboard) (one per student)
- Print-outs of Edible Plant Parts (one per student or team)
- Print-outs of team assignment Reading Response Contracts (one per student or team)
- Print-outs of Reading Response Tic Tac Toe Game (one per student)
- Supplies for students to complete Reading Response Contracts: can be paper and pencil, poster board and markers, etc.



VOCABULARY

Corn tassel – pollen producing flower at the top of corn

Debt – money that is owed or due

Harvesting – gather up the crop

Landlord – person who rents land to a tenant

Planting – place a seed in the ground to grow

Profit – financial gain, difference between the amount earned and the amount spent

Risky – full of possibility of failure or loss

Tenant – person who rents land from the landlord

Weeded – remove unwanted plants

BACKGROUND AGRICULTURAL INFORMATION

The fruits and vegetables we eat come from different parts of the plant. Many students may not make the connection that when they sit down for a meal; they are eating a seed, root, or stem. There are six edible plant parts: seed (reproductive part of plant); root (part of plant typically underground providing water and nourishment); stem (main body or stalk of plant); leaf (flat and green—attached to stem); fruit (sweet and fleshy product of tree/plant and contains seed); flower (brightly colored petals and bears seeds). Farmers grow plants for us to eat.

INTEREST APPROACH

- Project or pass out copies of the Edible Plant Part list of plant foods and which part of the plant we eat. This would be a great activity to complete either before or after the Tops and Bottoms language arts activity. (Found at the end of this document)
- What if you were only offered the tops of plants to eat tonight? Would it matter to you which type of plant you were being offered?
 - *The tops of carrots are not usually considered the yummy and nutritious part!*
- We eat many different parts of plants. Can you name some parts that we eat?
 - *seed, root, stem, leaf, fruit, flower, bark*

PROCEDURE

1. Read *Tops and Bottoms* by Janet Smith aloud to the class.
2. Attorney for a day: Negotiate Your Reading Response Assignment
 - a. Explain and conduct the whole class activity/demonstration:
 - i. Bear wants to go visit relatives for a season and rent his land to someone to grow a crop while he's gone. He would like to hire our class to be the attorney to help him draft a contract with his new tenant (word for renter). We will write an agreement for Bear to sign with his tenant so that each gets a fair share of the crop.

- b. Project or hand out copies of the Land Rend Contract document for the class to complete together. Together with the class, walk through filling out the contract:
 - i. Determine which character's name belongs where in the contract based on what they have to offer the partnership. 'Renter character' can be either Hare from the book or a new character developed by the teacher or class for Bear's new contract.
 - ii. Allow a few thoughts from the class to discuss which 'crop share' percentage would be fair for the landlord and tenant.
 - iii. Referring to the plant parts image or Edible Plants list, complete the Crop Share section of the contract to call out the most valuable food part of the plant.
3. Section the class into partners or small groups.
 - a. Pass out copies of the Reading Response Contract to each student. (Do you have a set of reading responses you use regularly with your class? Feel free to have them reference those to include in their Contract. There are also Reading Response images with ideas in the Companion Resources section of this guide.)
 - b. Either post or pass out Reading Response options for the class.
 - c. Review the Reading Response Contracts Assignment guidelines and announce the time frame they have; 20 minutes is the recommended minimum.
 - d. Float from group to group to observe students during contract development for assessment purposes if necessary, answer questions, and offer support.
 - e. Announce when the time to complete the contracts is expired.

LISTENING QUESTIONS

- What are some qualities that make a good farmer?
 - *Answers will vary.*

FOLLOW UP QUESTIONS

- Do you think the contract you composed is fair? (Do you think the land owner is getting enough of the crop? Do you think the farmer's percentage of the crop adequately rewards his work?)
 - *Answers will vary*
- What are some of the jobs the Hare completed in the field?
 - *weeded, watered, planted, harvested, separated the crop by taking out the edible parts of the plants*
- How do farmers complete similar jobs on the farm?
 - *Farmers do very similar jobs to the Hare. Farmers must:*
 - *Make sure the field is free of pests (weeds, insects, diseases).*
 - *Take care of the resources (soil, water, air).*
 - *Water crops (Often farmers use irrigation to water crops).*
 - *Harvest the crop.*

- *Market the crop. Farmers may sell grain, vegetables, and fruits at cooperatives or other markets. There are also other uses for the remainder of the plant. Unlike the Bear, who didn't know how to use the rest of the plant, farmers frequently are able to use more of the plant than one may think. For instance, after corn or wheat is harvested, animals can graze the field! Hay bales can even be made of the straw of wheat fields by baling up the plant that gets spit out of the back of a combine.)*
- What was difficult about writing the contract?
 - *Answers will vary*
- What would you change if you were to write another contract in the future?
 - *Answers will vary*

EXTENSION ACTIVITIES

- Edible Plant Parts – Food for Life
 - <https://www.slideshare.net/pd81xz/school-118>
- Edible Plants (Nebraska AITC)
 - <https://www.nefbfoundation.org/images/FOUndation/Educators/Enriching-Activities/Edible-Plants.pdf>
- Agriculture in Everywhere (Nebraska AITC)
 - <https://www.nefbfoundation.org/images/FOUndation/Educators/Enriching-Activities/Agriculture-is-Everywhere.pdf>

NATIONAL AGRICULTURAL LITERACY OUTCOMES

- **Food, Health and Lifestyle**
 - **T3.3-5 d.** Explain the costs associated with producing and purchasing food
- **Culture, Society, Economy & Geography**
 - **T5.3-5 b.** Discover that there are many jobs in agriculture
 - **T5.3-5 e.** Provide examples of agricultural products available, but not produced in their local area and state