

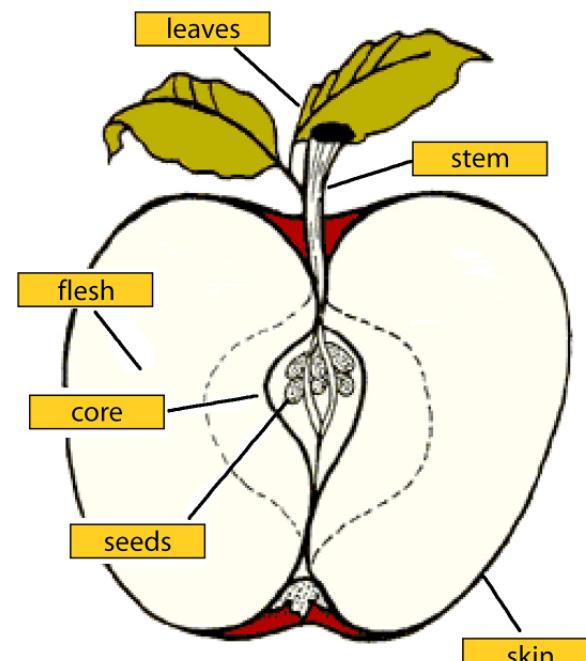
# Apples

## Did You Know

- The wild ancestors of apples grow in the mountains of central Asia.
- There are over 7,500 varieties of apples grown worldwide and 2,500 are grown in the US. However, only a handful of varieties are commonly found in grocery stores today.
- Check out Orange Pippin online for listings and descriptions of apple varieties ([www.orangepippin.com](http://www.orangepippin.com)).
- Apples were brought to the United States in the 17th century.
- The Bitterroot Valley and other areas in the western and south central part of Montana are the largest apple producing areas in the state.

## Grow Your Own

Planting the seed from your favorite apple variety will not grow that same variety and will likely produce apples that are bitter. To get a desired variety of apple (such as Sweet Sixteen), the trees have to be grafted. This means taking a branch from the desired variety and attaching it to a root to form a new tree. Growing apples requires planting more than one variety of tree to ensure pollination. Purchase one-year-old trees of different varieties that possess multiple branches and are certified to be disease resistant, especially to Fire Blight. Plant in early spring, allowing 35-45 feet of growth space for standard-size apple trees, less for dwarf varieties. Fruit trees such as apples are an excellent, long-term option for schools. Maintenance is minimal and the fruit is in season during the school year.



## Selection

Choose firm, shiny, smooth-skinned apples with intact stems. Apples should smell fresh, not musty. Remove apples with bruises or rot from the bag or container so they do not spoil the other apples.

## Storage

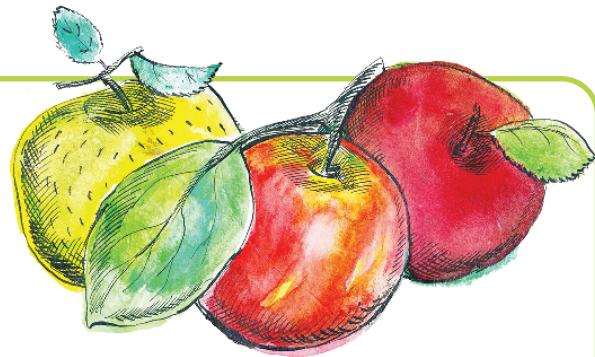
Refrigerate apples in a plastic bag, away from strong-smelling food. Store away from other fruits, as apples naturally produce ethylene, which may cause other fruits to prematurely ripen. Eat within three weeks. Prevent cut apples from browning by dipping them in lemon juice.

## Cooking

**Applesauce.** Place peeled, cored, and sliced apples in 1/4 inch of water. Steam apples in a microwave or pan on the stove until soft and add water if needed. Remove from heat, mash apples to desired consistency, and add seasonings such as cinnamon, cloves, ginger, or nutmeg. Eat warm or allow to cool.

**Bake.** Select larger apples and remove core with knife, leaving 1/2 inch of the apple core intact at the bottom. Put a small amount of seasoning in the hole. Place apples in a baking pan and add 3/4 cup water to the pan. Bake at 375°F for 30-40 minutes or until desired tenderness.

**Grill.** Combine 1/2 cup water and 1/4 cup lemon juice in a large bowl and put sliced apples in mixture for 30-60 minutes. Place soaked apple slices on skewers and grill about seven minutes on each side. Once grilled, remove from heat and add seasonings. For added variety and texture, add apples to a grilled meat or vegetable kabob.



**Raw.** Rinse and dry an apple to enjoy as is, or slice and dip in peanut butter, yogurt, or hummus. Dip apple slices in lemon juice to prevent browning.

**Season.** Enhance the flavor of apples with cinnamon, clove, ginger, or nutmeg.

**Preserve.** For information on preserving apples, look for Extension MontGuides on: Drying Fruit; Freezing Fruit; Home Canning Pressures and Processing Time; Making Jams, Jellies and Syrups. Visit [www.msuetension.org/nutrition](http://www.msuetension.org/nutrition) and click on the food preservation link or contact your Extension office.

*Adapted from the Apple Food Fact Sheet developed by Montana State University Extension. For the full fact sheet and other resources, visit: [www.msuetension.org/nutrition](http://www.msuetension.org/nutrition).*

## Nutrition Information

The saying “an apple a day keeps the doctor away” has truth to it. Apples are a good source of fiber and contain vitamins and minerals such as vitamin C and potassium. Most of the apple’s nutrients are located just below the skin and are removed when peeled. Potassium is an electrolyte and is needed for many functions in the body, including the electrical activity of the heart.

## Recipes

### Easy Applesauce

Get kids involved in mashing apples for a fun and easy treat.

*Source: Harvest for Healthy Kids ([www.harvestforhealthykids.org](http://www.harvestforhealthykids.org))*

#### Servings

6

#### Ingredients

4 medium apples  
1 cup water  
1/4 tsp cinnamon  
1/8 tsp nutmeg

#### Preparation

1. Peel and slice apples, removing the core. Leaving the peel on will result in chunkier applesauce and will retain more nutrients and color.
2. Place in pot.
3. Add water, cinnamon, and nutmeg.
4. Bring to a boil and let simmer until mushy.
5. Let children use a masher to mash up the apples into a sauce.
6. Set aside and let cool.
7. Serve warm or chilled.

### Apple 'N Cabbage Slaw

Serve as a tasty side dish or as a colorful addition to sandwiches!

*Source: Picture the Recipe (<http://picturethercipe.com>)*

#### Servings

6

#### Ingredients

3 cups red cabbage  
1 1/2 cups green cabbage or lettuce  
2 apples (recommended: golden variety)  
3 carrots (about 1 cup)  
4 green onions  
3 Tbsp of cilantro or more to taste  
3 Tbsp oil  
3 Tbsp honey  
3 Tbsp apple cider vinegar  
Juice of one lime (about 1 Tbsp)  
Salt & pepper to taste  
Optional: Pinch of cayenne

#### Preparation

1. Shred the cabbage into fine strips. Measure cabbage or lettuce and add to a large mixing bowl.
2. Grate the carrots using a big holed grater and add to the bowl along with sliced green onions.
3. Finely chop a small handful of cilantro and add it to the salad mix.
4. Lastly, cut the apples into thin match-stick pieces and add it to the salad. Don’t cut the apples until you’re ready to dress the salad since they will turn brown. Toss everything together well.
5. For the dressing, start with the salad oil in a jar or a bowl.
6. Add the honey, apple cider, lime juice, salt, pepper, and a light dusting of cayenne to the oil.
7. Put the lid on and shake the dressing (if you’re using a bowl simply whisk it with a fork) until the oil and other liquids are mixed well.
8. Drizzle over the salad and toss well until everything is coated in the dressing.
9. Serve chilled.

# Activities

## Grow Your Own

Adapted from [www.broogly.com/project/growing-apple-seeds](http://www.broogly.com/project/growing-apple-seeds)

### Montana Early Learning Standards

- 2.1—Fine Motor Skills
- 4.1—Curiosity
- 4.15—Scientific Investigations

### Description

Children will explore the process of seed saving, plant apple seeds and then observe and record the growing process.

### Supplies

- Apples (preferably local, organic)
- Paper towel
- Pots
- Potting compost
- Zip-lock bag

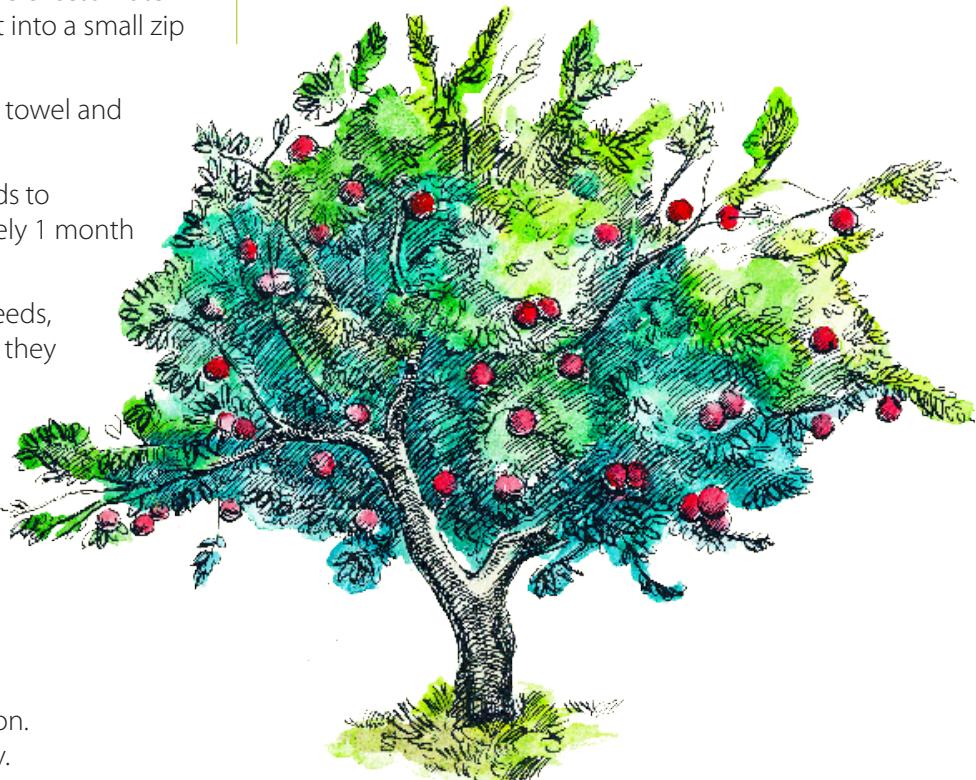
### Directions

Remove the seeds from the apple. Be sure to use seeds that are whole and not damaged.

1. Place the seeds in a warm dry place and allow them to dry out completely.
2. Wet the paper towel and then squeeze excess water from the towel. Fold it so that it will fit into a small zip lock bag.
3. Place the apple seeds onto the paper towel and place into the zip lock bag.
4. Place in the refrigerator. Leave the seeds to germinate – this will take approximately 1 month but may be faster or slower.
5. Once small shoots appear from the seeds, remove them from the refrigerator as they need to be placed in pots.
6. Fill your pots with potting compost. Use your finger to poke a hole in the compost about half an inch deep.
7. Very carefully transfer the apple seeds into the hole you have just made, and gently cover with soil.
8. Water the seed until the soil is damp.
9. Place the pot in a warm, sunny position. Water whenever the soil becomes dry.
10. Watch your apple seed grow.

### Tips

1. It is important to keep the compost damp but not wet – otherwise your seedling will not prosper.
2. It is fun to try to grow seeds from different varieties of apple. If you do this, don't forget to write the name of the variety on your zip lock bag.
3. Apples are normally propagated by grafting because they do not produce true from seed – in other words, the fruit on the seedling is unlikely to resemble to apple the seed came from. Your seedling is a true experiment – it may produce fruit that tastes wonderful, or it may not! Who knows, maybe you will have created a new, delicious variety of apple!
4. It will take about 3-4 years for an apple tree to bear fruit – it may take up to 10 years before that fruit is edible! Don't let that stop you and your kids enjoy the fun though!
5. Combine this activity with a reading of the story of *How Do Apples Grow* by Betsy Maestro.



# Extend the Fun

Source: [HfHK\\_Apples\\_Activity\\_Plan.pdf](#)

## Apple Tasting

- Children explore different types of apples
- Children describe the feel, smell, taste, color of apples and apple seeds
- Children learn that different apples have different characteristics

MELS 3.2–Expressive Communication

## Discovery Table

Cut an assortment of apple in halves or quarters, and leave some whole. Place apples on the discovery or sensory table so children can explore by looking, smelling and touching. Apples store well, especially when kept in a cold, dry place. Cut apple should be covered with plastic and refrigerated when not in use for classroom activities  
MELS 4.1–Curiosity

## Book Nook

*Apples A to Z*, by Margaret McNamara

*The Apple Pie Tree*, by Zoe Hall

*Bad Apple-A Tale of Friendship*, by Edward Hemingway



## Song/Movement

Way up high in the apple tree. (Point up.)

Two little apples smiled at me. (Make a shape of a apple with your hand.)

I shook that tree as hard as I could. (Pretend to shake a tree.)

Down fell the apples—

(Raise hands and let them fall.)

MMMMMM, were they good! (Circle tummy.)

MELS 4.6–Creative Movement and Dance

4.8–Music

## Apple Core Painting

On a day that you are exploring apples, save the cores to use at the art table to paint with!

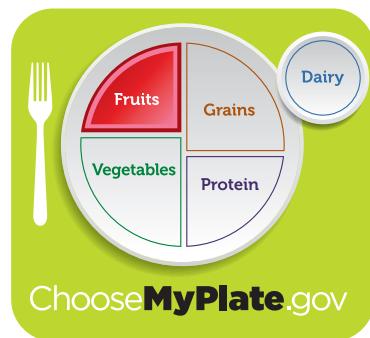
Provide the children with finger paint and finger paint paper. Put the paint in shallow trays. Use the cores to roll in the paint and then roll or stamp onto the paper.

MELS 4.9–Visual Arts

## Dig Deeper

For sources and photo credits along with more recipes, lessons, quick activities, resources, and guides, visit:

[mtharvestofthemonth.org](#)



[ChooseMyPlate.gov](#)

## Notes:

## 4 Montana Harvest of the Month: Apples



The Montana Harvest of the Month program showcases Montana grown foods in Montana schools and communities. This program is a collaboration between Montana Farm to School, Office of Public Instruction, Montana Team Nutrition Program, National Center for Appropriate Technology, Montana State University Extension, Gallatin Valley Farm to School, Montana Department of Agriculture, Montana Organic Association, and FoodCorps Montana. More information and resources are available at: [mtharvestofthemonth.org](#)

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