



Secrets of the Apple Tree

by Carron Brown

Illustrated by Alyssa Nassner

This unique book reveals the secrets of the apple tree: worms, toads, spiders, bumblebees, woodpeckers, and much more. The hidden wonders of this amazing habitat are all inside.

Before Reading

- Ask, "What is a secret?" "How can an apple tree have secrets?"
- Look at the cover of the book and ask the children what they see. Point out, if they don't notice, the four cut-outs that show what's hiding in the tree. Ask if those could be the apple tree's secrets.

The Read-Aloud Experience

To read aloud a Shine-a-light book, shine a flashlight behind each page asking, "Can you see..." or hold it to the light to reveal what is hidden in and around the tree.

- First, read the text of the page, including the question.
- Next, use light to reveal the hidden surprise.
- Once they have seen the surprise, turn the page and read more about the secret.
- This read-aloud experience should not be rushed. Allow the children time to look closely and to make comments on each page.
- Depending on the age and the attention span of your child or your group, you may consider reading half of the book in one sitting and the other half in a later sitting. Then the next time the children will be familiar with the secrets, and you can read it cover to cover. Subsequent readings will be just as exciting, because there will always be new things to see and new things to talk about.

Activities

This book has many topics that can be expanded upon with activities, lessons, and additional readings. The last two pages of the book give nine fun and educational areas for further exploration. And a list of 18 science and nature topics mentioned in the book follow at the end of this document.

Apples

- **Colors:** On a large piece of paper, make a graph of the colors of the apples with a column for red, green, yellow, and a mixture. Put an apple-shaped cut-out in each column that represents the apples you have on hand. Talk about which has the most, the least, the same. Count. Add. Subtract. Compare.
- **Apple peel:** While apples grow, the peel protects the soft part inside. But apple peel also contains a lot of vitamins and fiber. Discuss whether we should eat apples with or without the peel and why.
- **Smell:** Give each child an apple wedge to smell. Help them use as many words as possible to describe the smell. Write the words where all can see.
- **Taste:** There are over 7,000 varieties of apples! Have a tasting party with 3 or 4 different kinds, cut into bite-sized pieces. Make a graph with columns for each kind of apple, for example Granny Smith (green), Golden Delicious (yellow), Gala (red), and Honeycrisp (red & green). Each child writes their name in the column of the apple they like the best.



• **Seeds:**

- Tell the children about how seeds grow: Each seed contains a tiny plant (in embryonic form). Inside the seed, that tiny plant is hibernating. What's around that plant is everything it needs to sprout. So when we plant a seed in the ground, where it will have water and sunshine, it will germinate, or spring to life. Explain that apple seeds are not poisonous, and some people eat them on purpose because they believe they will help them be healthier.
- Give each child a styrofoam cup with soil in it. Let them draw a face on the side of the cup and then plant grass seed in the dirt. They will keep the dirt watered (but not over-watered), and soon the grass will grow and keep growing taller, making it look like their "person" grew green hair!

Watching Trees

Start a nature diary about a tree. Choose one tree nearby. Look closely to see how many living things you can spot in or around it. Look for things that are in the book *Secrets of the Apple Tree*: worms, toads, mushrooms, squirrels, bird's nests, etc., every few days in the summer, every few weeks in the fall, winter, or spring. Note what changes, what stays the same, what new things appear and what things aren't there anymore. Be sure to observe the bark, as well.

Rotting

Leaf litter is a layer of dead and rotting leaves on the ground under trees. Collect some leaf litter in a plastic bag. Spread out newspaper on the floor and shake out the leaf litter. Search carefully to see what you can find. You may want to use a magnifying glass. Look for tiny animals such as earthworms, spiders and centipedes. Put them back outside after you've looked at them.

Worms

Share some general information about worms:

- Worms do not have lungs or gills, so they breathe through their skin. When it rains, they have to come up to the top of the ground to get air.
- Worms are food for birds, snakes, frogs, toads, and moles.
- Worms live in the soil, and they need a covering of dirt and leaves over them.
- Worms help plants grow by keeping the soil broken down and not hard or crusty.

Literacy Activities

- Adjectives: Brainstorm all the words that describe worms. Write all the children's suggestions on a large piece of paper on the wall. Add more words later throughout the week as the children think of new ones.
- Phonemic awareness/rhymes: (a) Casually throughout your daily routine, say a worm-related word and think of something that rhymes with it, examples: squirmy-wormy, squiggle-giggle, ooey-gooey. (b) Also casually during the day, point out words that start with the sound of the letter w. These are spoken activities, not written.
- Creative writing: Write a song about worms. Use the tune of "Twinkle, Twinkle, Little Star" and write lyrics about what worms look and feel like, why we think they're cool (or not), what they do in their spare time, what their names are, etc. Be creative and silly! (Depending on the ages and abilities of your group, either the children



write or you use this as a class activity and write on the board as they give their ideas.)

- Translations: Learn the word for *worm* in different languages. Spanish: *el gusano*. Swahili: *minyoo*. German: *wurm*. French: *ver*. Sign language: Find this fun sign with movement on the Internet.

Science Activities

- Observing worms: Bring worms into the classroom with plenty of dirt and leaves. On a tray, pour out some dirt, leaves, and worms, and have the children observe what they do. Older children can write down their observations. If you keep the worms for more than one day, make sure they are kept moist and aren't able to get out of their container. Ask the children if they can see patterns in worm activities and if they can start to tell one worm from another.
- Being slimy: Other creatures besides worms are slimy, too. Read *Sally and Dave: A Slug Story* for an entertaining look into the world of slugs.
- Resources: Provide several non-fiction books about worms for the children to look through.

Art

Put fingerprint on paper, or put shaving cream directly on the table. Children make squiggly worm tracks.

Math (sorting/classifying)

Provide a variety of plastic fishing worms to sort.

Sensory

Put dirt and water for mud play in a water table or outdoors. This sensory experience can help expand thinking skills and vocabulary when children are encouraged to describe how the mud feels to them, and how they think the mud feels to different animals in the wild.

Large motor skills

- Demonstrate worm movement by pulling a rope on the ground. Have children jump over the wiggling worm.
- Wiggle on the ground like a worm.
- Play music and have the children make up their own Wiggly-Worm Walk.

Use ***Secrets of the Apple Tree*** to explore science, math, literacy, art, and movement in:

1. Trees
2. Apples
3. Seeds
4. Seasons
5. Worms
6. Toads
7. Mushrooms, toadstools, fungi, decay
8. Lizards
9. Rabbits
10. Underground nests & tunnels
11. Moths
12. Hidden colors (camouflage)



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13. Spiders and webs
 14. Baby birds
 15. Bumblebees, wax, nectar, honey
 16. Woodpeckers
 17. Squirrels
 18. Caterpillars