Table of Contents

Introduction ............................................. 4
How to Use This Book ................................. 6
Standards ................................................... 8

Plants
- Parts of a Seed Picture Chart ................. 10
- Parts of a Seed Vocabulary .................. 11
- Parts of a Plant Picture Chart .............. 12
- Parts of a Plant Vocabulary ................. 13
- Home/School Connections ..................... 14
- Background Information ....................... 15
- Unit Preparation ................................ 15
- Literature Links ................................ 15

Inquiry Activities ................................. 16
- Introducing the Plant Unit
- Dissecting Seeds
- Parts of a Seed Picture Chart
- Lima Bean Bags
- Measuring Seeds
- Literature Connection
- Observing Seeds
- Seeds Minibook and Big Book
- Observing Seed Plants
- Planting Seed Plants
- What Do Plants Need to Survive?
- Parts of a Plant Picture Chart
- Plant Life Cycle
- Plants Minibook and Big Book

Insects
- Parts of an Insect Picture Chart ............ 45
- Parts of an Insect Vocabulary ............... 46
- Insect Life Cycle Picture Chart .......... 47
- Insect Life Cycle Vocabulary ............... 48
- Home/School Connections .................... 49
- Background Information ...................... 50
- Unit Preparation ................................ 50
- Literature Links ................................ 51

Inquiry Activities ............................. 52
- Introducing the Insect Unit
- Harvester Ants
- Parts of an Insect Picture Chart
- Ladybird Beetle Larvae
- Mealworms
- Parts of a Mealworm
- Examining Insect Larvae
- Ongoing Observation
- Literature Connection
- Insects Minibook and Big Book
- Insect Life Cycle Picture Chart
- Insect Life Cycle Minibook and Big Book

Insects Culminating Activity: Taking Home the Mealworms and Ladybird Beetles ................. 62
Insects Culminating Assessment: Life Cycle Circle ......................... 63
Insects Science Journal .......................... 65
Insects Minibook .................................. 78
Insect Life Cycle Minibook ...................... 81
Parts of an Insect Word Cards ............... 84
Insect Life Cycle Word Cards ................. 85
Parts of an Insect Home Link ................. 86
Insect Life Cycle Home Link ..................... 87

Weather
- Weather Picture Chart ....................... 88
- Weather Vocabulary ......................... 89
- Seasons Picture Chart ....................... 90
- Seasons Vocabulary ......................... 91
- Home/School Connections .................... 92
- Background Information ...................... 93
- Unit Preparation ................................ 93
- Literature Links ................................ 93

Inquiry Activities ............................. 94
- Introducing the Weather Unit
- Weather Picture Chart
- Class Weather Chart
- Weather Chart Pictures
- Literature Connection
- Rain Activity
- Snow Activity
- Making Snowflakes and Sample Snowflake
- Wind Activity
- Wind Chimes
- Sun Activity
- Rainbow Activity
- Weather Minibook and Big Book
Table of Contents (cont.)

- *Seasons* Picture Chart
- Weather and Seasons
- What to Wear?
- *Seasons* Minibook and Big Book

*Weather* Culminating Activity:
- What Can I Do Outside? ................. 105

*Weather* Culminating Assessment:
- Weather Bears ....................... 106

*Weather* Science Journal ............. 107
*Weather* Minibook .................. 113
*Seasons* Minibook .................. 117
*Weather* Word Cards ................ 120
*Seasons* Word Cards ................ 122
*Types of Weather* Home Link ........ 123
*Seasons and Weather* Home Link .... 124

**Matter**
- *States of Matter* Picture Chart .... 125
- *States of Matter* Vocabulary ........ 126
- Home/School Connections .......... 127
- Recipe Cards ....................... 128
- Background Information ............ 131
- Unit Preparation ................... 131
- Literature Links .................... 131

**Inquiry Activities** ............... 132
- Introducing the Matter Unit
- *States of Matter* Picture Chart
- Playing with Matter
- States of Matter
- Liquids Demonstration/Activity
- Solids Demonstration/Activity
- Gases Demonstration/Activity
- Changes in States of Matter Demonstration
- Mixing Liquids Investigations
- Mixing Liquid and Solid Investigation
- Literature Connection
- *States of Matter* Minibook and Big Book
- *Changes in States of Matter* Minibook and Big Book

*Matter* Culminating Activity:
- Making Ice Cream .................... 150

*Matter* Culminating Assessment:
- Sequencing Changes ................ 152

*Matter* Assessment ................ 155

*Matter* Science Journal .......... 157
*States of Matter* Minibook ......... 164
*Changes in States of Matter* Minibook ................ 167
*Matter* Word Cards ................ 170
*States of Matter* Home Link ....... 171
*Changes in States of Matter* Home Link ............... 17

**Germs**
- *Germs* Picture Chart ............. 173
- *Germs* Vocabulary ................. 174
- Home/School Connections .......... 175
- Background Information .......... 176
- Unit Preparation ................... 176
- Literature Links .................... 176

**Inquiry Activities** ............... 177
- Introducing the Germs Unit
- Moldy Bread Bags
- Literature Connection
- *Germs* Picture Chart
- Importance of Doctor Visits
- How to Prevent Disease

- *Germs* Minibook and Big Book .... 180
- *Germs* Assessment ................. 181
- *Germs* Science Journal .......... 182
- *Germs* Minibook .................. 185
- *Germs* Word Cards ............... 188
- *Germs* Home Link ............... 189

**Teeth**
- *Parts of a Tooth* Picture Chart .... 190
- *Parts of a Tooth* Vocabulary ...... 191
- Home/School Connections .......... 192
- Background Information .......... 193
- Unit Preparation ................... 193
- Literature Links .................... 193

**Inquiry Activities** ............... 194
- Introducing the Healthy Teeth Unit
- *Parts of a Tooth* Picture Chart
- Literature Connection
- Importance of Dental Visits
- Class Tooth Chart
- Counting Our Teeth
- How to Take Care of Your Teeth
- *Healthy Teeth* Minibook and Big Book 197

*Teeth* Culminating Activity:
- Healthy Teeth ...................... 198

*Teeth* Assessment ................ 200
*Teeth* Science Journal .......... 201
*Healthy Teeth* Minibook .......... 204
*Teeth* Word Cards ............... 207
*Parts of a Tooth* Home Link ...... 208
**Insects** (cont.)

**Lesson 4: Ladybird Beetle Larvae**

Introduce the class to the ladybird beetle larvae. Explain that these are ladybird beetle larvae, or “baby” ladybugs. Explain that most people call these insects ladybugs, but their real name is *ladybird beetle*. Ask the class, *How are these different from or the same as the adult ladybird beetles you have seen?* Record student responses on chart paper using a Venn diagram comparing ladybird beetle larvae and adult ladybird beetles. Explain to the students that they will observe ladybird beetles each day to see if there are any changes. Have the children draw a picture of the ladybird beetle larvae in their *Insects* Science Journals (Observation 2, page 67).

*Inquiry Skill—Compare and Contrast*

![](venn_diagram.png)

**Lesson 5: Mealworms**

**Part 1:** Introduce the class to the mealworms. Explain that these are the larvae of grain beetles. Explain the habitat you created for the mealworms. Tell the children that mealworms are scavengers that eat rotten grain and fruit, which they find in their environment. Tell them that the mealworms live in and eat the oatmeal and that they eat the apple for moisture (water). Ask the children if they have ever seen mealworms before. Some students may be familiar with them because they are used as bait for fishing and as food for pets such as lizards, turtles, and birds. Explain to the students that they will observe mealworms each day to see what they do and if there are any changes.

**Part 2:** Explain to the children that they will work in pairs to observe mealworms. Provide each pair with a paper plate, a hand lens, and 2–3 mealworms. After they have observed their mealworms, they will draw a picture of their mealworms and write about them in their *Insects* Science Journals (Observation 3, Prediction 2, page 68).

*Inquiry Skills—Observation, Predicting*
Lesson 5: Mealworms (cont.)

The following activities are fun to have the children try with the mealworms after they have completed Part 2 (see page 54).

**Mealworm Races**

**Materials** (for each pair)
- 2 mealworms
- paper plate

**Directions**
1. Place two mealworms on one side of the paper plate.
2. Draw a line on the opposite side of the plate for the “finish line.”
3. Observe the mealworms to see which one “races” across the finish line first!
4. Record the results in your *Insects* Science Journals (page 69).

**Light or Dark?**

**Materials** (for each pair)
- 2 mealworms
- paper plate
- 4 1/2” x 6” (11.4 cm x 15.2 cm) piece of white construction paper
- 4 1/2” x 6” (11.4 cm x 15.2 cm) piece of black construction paper

**Directions**
1. Place each paper on one side of the paper plate.
2. Place two mealworms on the paper plate.
3. Observe the mealworms to see if they crawl to the light or dark side.
4. Record the results in your *Insects* Science Journals (page 70).

**Wet or Dry?**

**Materials** (for each pair)
- 2 mealworms
- paper plate
- access to spray bottle filled with water

**Directions**
1. Using a spray bottle, wet one side of the paper plate.
2. Place two mealworms on the paper plate.
3. Observe the mealworms to see if they crawl to the wet or dry side.
4. Record the results in your *Insects* Science Journals (page 71).
Wet or Dry?

1. Draw your mealworms.

2. Write about your mealworms.

Observation: Do the mealworms like wet or dry best?