

Answer Keys

Fruit Groups

Doodle Bugs

- Underline: **Pomes, drupes, berries, melons and citrus fruits are all types or groups of fruits.**
- Circle: **Apricots, cherries or coconuts**
- Box: **Strawberry or blueberry**
- Drawing: **A melon with seeds.**

SCIENTIFIC INQUIRY:

Pomes, Drupes, Berries, Melons & Citrus Fruit

Matching: 1. d 2. a 3. e 4. b 5. c

- Apple: **10 or less seeds in a paper-like core; Outside–red, Inside–white; pome**
- Cantaloupe: **Over 100 seeds in the center; Outside–green and yellowish-tan, Inside–light orange; melon**
- Clementine: **No seeds or 1-2 seeds in each section; Outside–orange, Inside–orange; citrus fruit**
- Peach: **1 pit in the center of the fruit; Outside–bright peach with red flecks, Inside–pale peach; drupe**
- Strawberry: **Over 100 seeds on the outside; Outside–bright red, Inside–pale red; berry**

Fruit Reactions

Doodle Bugs

Circle: **Phenolase, oxygen**

Draw: **A banana turning brown after it is peeled. Phenolase + oxygen = browning**

Fill-in the blank: **Answers will vary. Example:** My idea is to stop browning by not letting oxygen touch the fruit. You can do this by covering the fruit with plastic wrap.

SCIENTIFIC INQUIRY:

Browning

- Plain: **White with light brown spots; sweet; No, phenolase reacted with oxygen.**
- Sugar: **White with a couple yellow spots; very sweet; Yes, less oxygen was able to react with the phenolase, however some oxygen did react with the phenolase to make yellow spots.**
- Lemon juice: **White; slightly tart or sour; Yes, since lemon juice is an acid, it stopped phenolase from reacting with oxygen.**
- Cream of tartar: **White but mushy; bitter; Yes, since cream of tartar is an acid, it stopped phenolase from reacting with oxygen.**

What is the best way to keep your bananas from turning brown? **The best way to keep bananas from browning is to add lemon juice. Lemon juice keeps the bananas from browning and doesn't make the bananas taste bad.**

Answer Keys (continued)

WHILE YOU WAIT:

Fruit Salad

1. **No, phenolase did not react with oxygen. Or: Yes, we took too long to mix the fruit so phenolase did react with the oxygen.**
2. **Clementines and pineapples are both kitchen acids.**

Perfect Prune

Doodle Bugs

- Circle: **Raisins**
Fill-in the blank: **A plum becomes a prune when it is picked and dried. The pit is also removed.**
Underline: **California**
Box: **Potassium, vitamin A, magnesium and iron**

SCIENTIFIC INQUIRY:

Plump Plums and Pit-less Prunes

- Plum Circle: **Purple, plum or deep red: has a pit, plump, smooth, easily chewed, waxy**
Prune Circle: **Black; no pit; dry; wrinkly; sticky; chewy, shiny**
Overlap Plum and Prune: **Drupe, fruit, grows on a tree, high fiber, healthy, source of nutrients, sweet & fruity tasting**

1. **Answers will vary.**
2. **Answers will vary.**
3. **Drupe**

Human Graph: **Answers will vary.**

Proficiency Questions (Workbook)

1. **b** 2. **d** 3. **a** 4. **d** 5. **c** 6. **c**

Proficiency Questions (Virtual CD)

1. **b** 2. **d** 3. **a** 4. **b**