

Educator Answer Key

Junior Garden Detective Activity Pack

Open-ended observation, drawing, and garden-design responses may vary. Look for evidence of careful noticing and garden care.

Junior Garden Detective Activity Pack

Page 2 - Journal

Open-ended. Accept accurate observations from the student's own garden, yard, porch, park, or outdoor space.

Page 3 - Sound Hunt

Open-ended. Any sound actually heard is acceptable: buzzing, fluttering, bird calls, rustling leaves, wind, water, tapping, or even a quiet garden.

Page 4 - Matching

1-B Bumblebee | 2-A Hummingbird | 3-C Butterfly | 4-D Moth | 5-E Ladybug. Nighttime visitor: Moth.

Page 5 - Nectar Gap

1. nectar 2. flowers 3. seasons 4. night 5. water. Bonus drawings may vary.

Page 6 - Bloom Calendar

Story-based examples: spring - early blossoms; summer - wide summer flowers or trumpet vines; fall - late-blooming asters; night - pale, sweet-smelling moonflowers.

Page 7 - Maze solution



Correct route stays inside the open corridor from Start to Finish.

Open-ended pages

- Page 8 - Drawing Activities: daytime visitor may be Bumble, Ruby, or Butterfly; nighttime visitor is Mina Moonmoth. Flower choice should fit the visitor.
- Page 9 - Design a Pollinator Garden: strong plans include flowers, water, shelter, and blooms for more than one season or time of day.

Matching, Day/Night & STEM

Closed-response answers for the companion activities



Pollinator Needs Matching Game

Page 1 1-A Bumblebee | 2-B Hummingbird | 3-C Butterfly | 4-D Moth | 5-E Ladybug.

Bonus Circle the visitors that also need water: Bumblebee, Hummingbird, Butterfly, and Ladybug.

Page 2 1-C Food | 2-D Water | 3-E Shelter | 4-F Flowers | 5-B Seasons | 6-A Pollinators.

Healthy garden Check all three: Food, Water, Shelter.

Page 3 cards Multiple matches can be correct. Clear matches include Moth - Night Blooms; Bumblebee/Hummingbird/Butterfly/Ladybug - Water; Moth/Ladybug - Shelter. Ask students to explain other choices.

Day or Night? Pollinator Activity

Page 1 Daytime: Bumble, Ruby, Butterfly. Nighttime: Mina Moonmoth. Bonus: Mina Moonmoth.

Page 2 clue match 1-A Bumble | 2-B Ruby | 3-C Butterfly | 4-D Mina.

Garden design Day box: flowers for Bumble, Ruby, and/or Butterfly. Night box: pale night blooms for Mina. Plant choices may vary.

Nectar Gap STEM Activity

Page 1 - Needs Check all three: Food (flowers), Water, Shelter.

Page 1 - Clues Check all three: Very few blooms, Fewer visitors, A quiet garden.

Page 1 - My idea Accept plans that restore food over time: plant flowers that bloom at different seasons/times, and include shallow water and safe shelter.

Page 2 - Sequence 1. Notice that the garden is quiet. 2. Look for which flowers are blooming now. 3. Plant flowers for spring, summer, fall, and night. 4. Add shallow water and safe shelter.

Page 2 - Plan Strong designs check all six: spring flowers, summer flowers, fall flowers, night blooms, water, and shelter.



Vocabulary & Science Notes

Teacher-friendly support for discussion and review



Vocabulary

Teacher-support definitions for terms used in the activities.

Pollinator

A garden visitor that moves pollen from flower to flower, helping plants make seeds, fruits, and more flowers.

Nectar gap

A time when hungry garden visitors cannot find enough blooming flowers.

Nectar

A sweet liquid in flowers that many pollinators drink.

Pollen

Fine material made by flowers that can be carried from one flower to another.

Bloom

A flower that is open, or the act of a flower opening.

Shelter

A safe place to rest or hide, such as leaves, stems, brush, or protected spots.

Observation

Careful looking and listening to notice what is happening.

Science ideas to reinforce

- Different flowers bloom at different times of day and in different seasons.
- A nectar gap can happen when too few flowers are blooming at the same time.
- Bumble, Ruby, and butterflies are daytime visitors in these activities; Mina Moonmoth is the nighttime visitor.
- A healthy garden offers food, water, and shelter.
- Maya solves the problem by observing first, finding a pattern, and then changing the garden plan.
- Not every helpful garden visitor is a pollinator. Ladybugs are included as helpful visitors because they can eat garden pests.

Simple scoring guide for open-ended work

Use understanding rather than exact wording as the goal.

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| 2 - Strong evidence | Connects the observation to garden needs and includes multiple supports such as seasonal/day-night blooms, water, or shelter. |
| 1 - Developing | Names at least one relevant pollinator need, visitor, flower, season, or observation. |
| 0 - Revisit | Response is unrelated or does not yet show the science idea. Re-read the garden clues together and discuss what changed. |

Teacher note

The observation journal, listening pages, bloom planner, water-station reflection, kindness challenge, and garden-design pages are intentionally open-ended. Encourage students to explain what they noticed and why their choices could help a garden visitor. The goal is careful observation, curiosity, and thoughtful problem solving.

Useful follow-up questions:

- What clue helped you decide?
- Which visitor would benefit from your choice?
- What could bloom before or after this flower?
- What would you change if the garden became quiet again?

