

Oregon



Agriculture in the  
Classroom Foundation

**Developed By:**

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# Summer Ag Institute Lesson Plans

**Title of Lesson:** Graphing & Recording Growth

**Academic Subject:** Math and Writing

**Theme:** Japanese Quail

**Grade Level:** Grade 2

## **CIM/CAM Standards: 3rd grade Benchmark**

1. English-writing/ Communicate knowledge of the topic (E14)
2. English-writing/ Use correct spelling (of vocabulary words), grammar, punctuation, and capitalization (E18)
3. Mathematics/ Select & use units and tools of measurement (M8).
4. Mathematics/ Measure length and weigh using standard and nonstandard units of measure (M10).
5. Mathematics/ Make and read a graph (M10).
6. Science/ Use basic scientific process skills to observe, measure, and communicate (S2).

## **Learner Objective: (The student will once a week for 4 to 6 weeks)**

1. Measure the baby quail using centimeters. Record on graph paper.
2. Weigh the baby quail using unifix cubes as the measuring unit. Record on graph paper.
3. Write about the changes that you observe.
4. Draw a picture showing the changes you observed.

## Vocabulary:

- |              |                    |
|--------------|--------------------|
| 1. incubator | 10. Japanese quail |
| 2. hatch     | 11. weigh          |
| 3. egg tooth | 12. scales         |
| 4. quail     | 13. measure        |
| 5. feathers  | 14. centimeters    |
| 6. beak      | 15. unifix cubes   |
| 7. feet      | 16. male           |
| 8. toes      | 17. female         |
| 9. wings     |                    |

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## Anticipatory Set:

### Instructional Outline (Teaching content)

1. Carefully hold the quail with the legs stretched out and measure from the toes to the top of the head, using the centimeter ruler. Record the results on graph number one. Record the date.
2. Weigh the quail on balance scales using unifix cubes as the measuring unit. Record the results on graph number two.
3. Write at least 2 sentences telling about the baby quail.
4. Draw a picture of the baby quail. Look carefully at the colors and patterns of the feathers.
5. Repeat activities A, B, C and D once a week for 4 to 6 weeks. Look for and discuss changes

## Conclusion:

1. What changes did you see?
2. How long did it take for the quail to grow up?
3. How long does it take for a cow? Sheep?  
Chicken? Horse?

### Strategies

#### (What to do, explain or have students do)

Teachers carefully model this!

Partner work.

One student holds the quail and one measures.

Have students construct a “cage” out of paper.

As the birds grow larger “cages will need to be made.

Partner work—One student puts bird in cage and watches it while other student uses the unifix cubes to weigh the bird.

Make a vocabulary/ spelling chart for students to use when they are writing.

These papers and graphs could be made into a book and shared with other students.

**Resources:**

1. 4-H Quail hatching incubator with eggs!  
Contact your local Oregon State University (OSU) Extension County Office.
2. Centimeter rulers
3. Balance scales
4. Unifix cubes
5. Graph paper
6. Writing paper
7. Art paper

**Evaluation:**

## OSU EXTENSION COUNTY OFFICES

• Baker County Extension	541/523-6418
• Benton County Extension	541/757-6750
• Clackamas County Extension	503/650-3125
• Clatsop County Extension	503/325-8573
• Columbia County Extension	503/397-3462
• Coos County Extension	541/396-3121x240
• Crook County Extension	541/447-6228
• Curry County Extension	541/247-6672
• Deschutes County Extension	541/548-6088
• Douglas County Extension	541/672-4461
• Gilliam County Extension	541/384-2271
• Grant County Extension	541/575-1911
• Harney County Extension	541/573-2506
• Hood River County Extension	541/386-3343
• Jackson County Extension	541/776-7371
• Jefferson County Extension	541/475-3808
• Jefferson County Extension - Warm Springs	541/553-3238
• Josephine County Extension	541/476-6613
• Klamath County Extension	541/883-7131
• Lake County Extension	541/947-6054
• Lane County Extension	541/682-4243
• Lincoln County Extension	541/574-6534
• Linn County Extension	541/967-3871
• Malheur County Extension	541/881-1417
• Marion County Extension	503/588-5301
• Morrow County Extension	541/676-9642
• Multnomah County Extension	503/725-2000
• Polk County Extension	503/623-8395
• Sherman County Extension	541/565-3230
• Tillamook County Extension	503/842-3433
• Umatilla County Extension	541/278-5403
• Union County Extension	541/963-1010
• Wallowa County Extension	541/426-3143
• Wasco County Extension	541/296-5494
• Washington County Extension	503/725-2300
• Wheeler County Extension	541/763-4115
• Yamhill County Extension	503/434-7517