

HONEY BEE LIFE CYCLE LESSON



SUMMARY/BIG IDEA:

Students will use manipulatives to learn about the honey bee life cycle.

MATERIALS & RESOURCES:

- Five sets of honey bee life cycle figures or five sets of color copied, laminated life cycle stages cut apart for students to manipulate.
- Five sets of laminated cards with the labels egg, larvae, pupa, and adult bee for students to match to picture cards or figures.
- [Time-Lapse Life Cycle Video](#)
- [Ted Talk First 21 Days of a bee's life](#)
- [Lifecycle of a bee template](#)

STEPS:

PART ONE:

1. Pass out honey bee life cycle figures OR color copied, laminated life cycle stages to each group.
2. Ask students to hold up the figure that they believe is the first step in the life cycle (egg).

Hold up the egg and use the figures to demonstrate how the queen places her abdomen in the hive to lay one egg in each cell (can lay up to 2,000 eggs a day). Ask students why the queen lays less eggs in winter (less flowers so she doesn't need as many worker bees).

3. Ask students to hold up the next step (larvae).

Hold up the larvae and explain that when you see a worker bee's abdomen sticking out of a cell it is either cleaning the cell or feeding nectar and pollen to a baby bee larva.

4. Ask students to hold up the next step (pupa).

Hold up the pupa and explain that after the larva gets as big as the cell they close the cell and begin developing into an adult bee (wings, eyes, legs, and antennae). What does this remind you of? Butterflies changing from caterpillars into adult butterflies!

5. Ask students to hold up the last step (adult bee).

Hold up the adult and explain that after the bee is completely done metamorphosing they chew their way out of the cell and begin working!

PART TWO:

6. Show students the time-lapse video of the honey bee life cycle. Remind them that this is fast forward and that it actually takes about 20 days for this entire process to happen.

PART THREE:

1. Act out the honey bee life cycle. Students begin as a tiny egg curled up on the classroom floor. Then they slowly curl out into a bee larva and pretend to eat pollen and nectar from nurse bees. Then they puff air in their cheeks and use their arms to show the larva getting bigger and bigger. As a pupa they develop wings, eyes, and antennae. Finally, as an adult bee, they stand up and chew their way out of the cell, stretching their wings and testing out their new legs.

ASSESSMENT/REFLECTION:

Students work in groups of four to put the life cycle figures in the correct order (#1 places the egg first, #2 places larva second, #3 places pupa third, and #4 places adult last).



Bee Journal Entry- Beginning with the first step in the bee life cycle (egg), write how you feel during each stage of the life cycle if you were a honey bee. What changes are you undergoing? What do you feel like? What do you look like?



HONEY BEE LIFE CYCLE LESSON STANDARDS

NEXT GENERATION SCIENCE

3-LS1-1

ELA COMMON CORE

W.3.3; RI.3.7

W.4.3; RI.4.7

W.5.3; RI.5.7