

Growth and Development: Day 1

This week through Weekday Wonders, young scientists will learn about life cycles. The week starts with your scientist exploring how animals grow and develop. Then scientists will take a closer look at specific animal and plant life cycles. The week will finish by looking at how the environment might impact these life cycles.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the <u>Introduction to Weekday Wonders</u>.



Question of the Day How do animals grow and develop?



Daily Nature Journal

Ask your young scientists to find a new spot or vantage point to journal today. If he or she has been sitting to do their journal, encourage him or her to try standing or lying down. He or she

could even lie down under a tree and look up into it to get a different perspective. This will help your scientist discover new things! If you need more information, use the <u>Guide to Nature Journaling</u> to support them in nature journaling each day.



Look What I Can Do!

Print out or write the descriptions on page 3. Ask your young scientist to cut them apart. In the meantime, create a 10-foot timeline for your scientist to use. This could be a piece of

string or yarn, a piece of masking tape, or drawn on a piece of butcher paper. Label the timeline with the following dates by either writing on it (tape or paper) or adding small pieces of tape with labels (string).

- 1" from left, place a label that says 2 months
- 3" from left, place a label that says 6 months
- 6" from left, place a label that says 1 year
- 1 foot from left, place a label that says 2 years
- Every additional foot represents 2 years, so add labels that say 4 years, 6 years, 8 years, etc.

Ask your scientist to place all the human milestone cards on the timeline using tape or clips. You may need to help your scientist understand the timeline labels to get started. If it helps, you can also ask him or her to underline the time period on the cards to emphasize whether it is in days, weeks, months, or years. The cards should spread out across most of the timeline.

Have your scientist complete the process for the other animals, again making sure that s/he pays close attention to the dates and the divisions on the timeline.

Once your scientist has added all the cards to the timeline, ask him or her to make some observations. The observations could be about the card placement in general, such as, "Most of the cards are very close to the left end, meaning they happen early in life," or about specific animals, "All the green cards for the frogs happen within 1 year while the humans take 18 years."

You can extend this lesson by having your young scientist make a new timeline that is 4 feet long that includes just 2 years of time. This will help them spread out many of the animal cards more. You can also have your young scientist research the milestones for other animals.



Things That Grow Scavenger Hunt

For today's movement activity, your young scientist will go on a scavenger hunt to look for things that are growing or changing. Start by having your young scientist look around inside

for things that grow. Have your scientist draw or write the name of each object. Then, have him or her list evidence for why your scientist thinks the object grows.

Next, have your young scientist go outside and do the same process. They may need prompts to look for things like buds on plants; small, light green leaves at the ends of branches; nests or eggs; and other signs of growing. Be sure he or she adds evidence to show that the object grows.

To challenge your scientist further, ask your younger scientist to run to find five things that change as they grow as fast as s/he can. Older scientists can be challenged to find 10 items in three minutes.



Nature Journal

In the previous activity, your young scientist listed things that grow inside and outside. Have your scientist choose one item from the "inside" list and one from the "outside" list.

Have your scientist write or draw about how each of these things changes as it grows. For example, your scientist may discuss how a flower started as a seed and grew into a much bigger plant over time. Once your scientist has drawn both pictures, have him or her observe any similarities and differences between the two.

Encourage your scientist to revisit their lists and the items periodically to see if s/he can observe any continued signs of change and growth.

Look What I Can Do Card Sort

Humans usually learn to walk about 1 year after they are born.	Giraffes learn to walk about 30 minutes after they are born.	A robin learns to fly when it is about 1 month old.	A turtle can walk immediately after hatching from the egg.	An opossum can crawl/walk immediately after it is born.
Humans may start to learn how to cook their own food at about 10 years old. It can be older or younger.	Giraffes start to learn to find and eat leaves at about 4 months old.	Robins start to learn to find their own food at about 2 weeks old.	A turtle learns to find their own food 3 days after hatching.	An opossum starts to learn to find food at about 2 ½ months old.
Humans are fed by their parents for about 2 years. (Parents generally provide the food until the humans are independent.)	Giraffes are fed by their mothers for about 14 months.	A robin is fed by its parents until it is about 1 month old.	A turtle is fed by a yolk sac attached to its belly for about 2 days after hatching.	An opossum is fed by its mother until it is about 3 months old.
Humans are generally independent from their parents at about 18 years old.	Giraffes are independent from their mother at about 3 years old.	Robins leave the nest at about 1 month old.	A turtle is independent from its parents immediately.	An opossum becomes independent from its mother at about 3 ½ months old.