

ACTIVITY 5 Ranch Life Cycles

RANCH LIFE SERIES | BOOK 1 | RANCHING AND LIVESTOCK

Chapter 4

Content Area

Science

Topic

Life Cycles

Objective

Students will sequence life cycles and compare stages between different organisms.

Texas Essential Knowledge and Skills (TEKS):

1.13C, 2.13D, 3.13B

Ranch Life Cycles

CONTENT AREA: Science

TOPIC: Life Cycles

GAME MATERIALS:

- SECURITY BRIEFING (page A5-2): 1 per student or student group
- RANCH LIFE CYCLES SORTING MAT (page A5-3): 1 set per student/student group
- RANCH LIFE CYCLES SORTING/REFERENCE CARDS #1-3 (pages A5-4 to A5-6): 1 set per student or student group
- · Vis-a-Vis Marker, fine tip
- THE BOTTOM LINE (page A5-8): 1 per student or student group

READING STRATEGY:

Students will read Chapter 4 (pages 15-22) before they play the game.

GAME INSTRUCTIONS:

- · Give each group of students a RANCH LIFE CYCLES SORTING MAT.
- Give students two sets of RANCH LIFE CYCLES SORTING/REFERENCE CARDS to compare. (There are four animal and two insect life cycles included in this activity.)
- Students will first sequence the SORTING CARDS using the REFERENCE CARDS for clues.
- Once SORTING CARDS are sequenced, students will discuss what is alike and different between the two life cycles.
- Once students are fished with the task, have them bag their SORTING/REFERENCE CARDS to pass on to another team. They will repeat steps 1 -5 until every group has compared all the cards.

STUDENT SKILLS ASSESSMENT:

Have students (or student groups) complete THE BOTTOM LINE worksheet at the end of the game.

Ranch Life Cycles



SECURITY BRIEFING -

WORDS OF WISDOM FROM HANK THE COWDOG:

As the head of Ranch Security, I make it my business to know the **life cycles** of the animals and insects that live here.

*Baby chickens come from eggs. Did you know that? Maybe you thought that bacon comes from eggs, but that's incorrect. Bacon comes from pigs and baby chicks come from eggs, but bacon and eggs are sometimes found together in breakfast situations because... Wait a minute, hold everything. We weren't talking about the baby chicks.

Back to my duties as Head of Ranch Security and life cycles...

In the early stages of life, young animals need my protection from **predators** like coyotes and other carnivores. You may recall that Sally May has trusted me to guard the chicken house in the past. The ranch also has more bugs than I can name. Insects can cause a lot of trouble. Mosquitoes drive me nuts. You want to know why cowboys always wear long-sleeved shirts, even in hot weather? MOSQUITOES! Without long sleeves, a cowboy's arms become Christmas dinner for mosquitoes. My role is prevention. By knowing the **stages** of mosquito **life cycles** I can predict their next move and take action! (I am fond of knocking over buckets of water to help control their **populations**.)

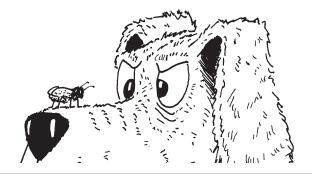
* excerpt from The Case of the Tender Cheeping Chickens" by John R. Erickson

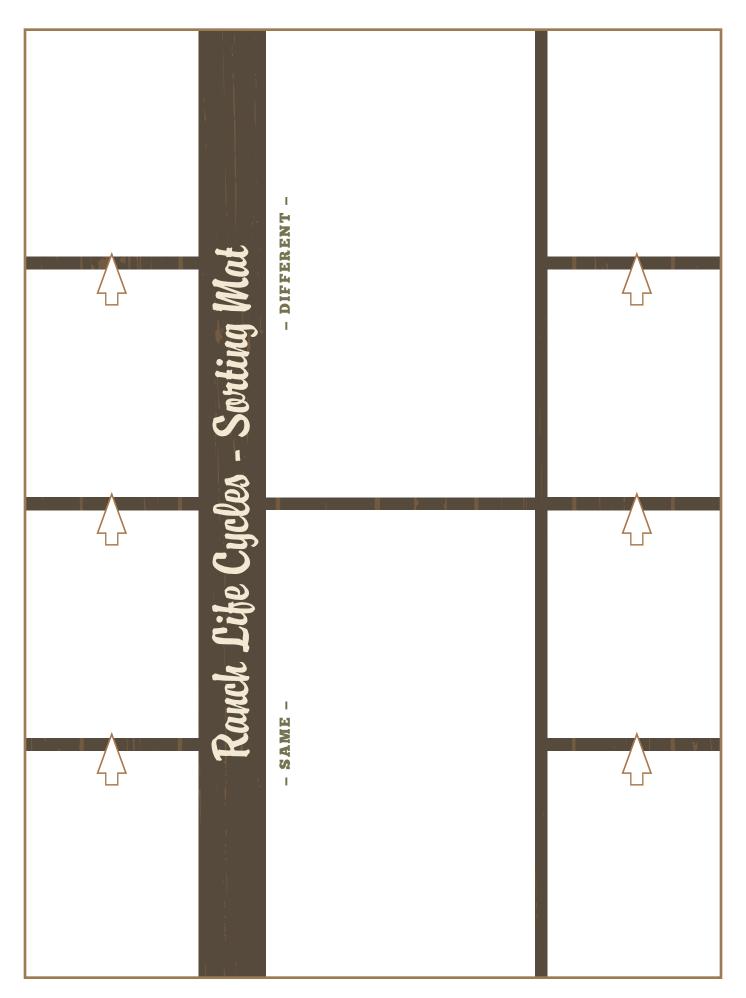
ACTIVITY INSTRUCTIONS:

- Grab a RANCH LIFE CYCLES SORTING MAT and two sets of RANCH LIFE CYCLES -SORTING/REFERENCE CARDS to compare.
- 2. Sequence the SORTING CARDS on the SORTING MAT using the REFERENCE CARDS for clues.
- 3. Once you have both sets of SORTING CARDS sequenced, discuss what is alike and different about the two life cycles.
- 4. Place your RANCH LIFE CYCLES SORTING/REFERENCE CARDS in bag and pass them to another group.

WRAP UP:

Fill out THE BOTTOM LINE worksheet after you have completed the activity.





LIFE CYCLE OF A

STABLE FLY

STAGE 1 - EGG

A female lays 25-50 eggs. Eggs hatch in 1-4 days.

STAGE 2 - LARVA

The larva eat decaying material and stay in this stage from 6-30 days.

STAGE 3 - PUPA

12-16 days (non-feeding stage)

STAGE 4 - ADULT

An adult lives about 2-3 days and feeds on blood.

Total Life Span: 23-52 days









LIFE CYCLE OF A

MOSQUITO

STAGE 1 - EGG

A female lays a raft of 40-400 eggs in water. The eggs hatch in 7 days.

STAGE 2 - LARVA

The larva live in water for four molts and eat organic matter.

STAGE 3 - PUPA

2 days (non-feeding stage)

STAGE 4 - ADULT

An adult lives about 1 week and feeds on blood.

Total Life Span: 14-30 days









LIFE CYCLE OF A

CHICKEN

STAGE 1 - MATING

Male: Rooster // Female: Hen

A hen will start laying eggs at the age of 5 months.

STAGE 2 - GESTATION

21 days

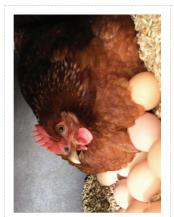
STAGE 3 - JUVENILE

Baby: Chick

The chick forges for food about 1-2 hours after hatching.

STAGE 4 - ADULT

Total Life Span: 8-10 years









LIFE CYCLE OF A

DOG

STAGE 1 - MATING

A female mates at 1 year of age.

STAGE 2 - GESTATION

2 months

STAGE 3 - JUVENILE

Baby: Puppy

The puppy drinks its mother's milk for about 4 weeks.

STAGE 4 - ADULT

Total Life Span: 12 years









LIFE CYCLE OF A

COW

STAGE 1 - MATING

Male: Bull // Female: Cow

A cow mates at 3 years of age.

STAGE 2 - GESTATION

9¹/₂ months

STAGE 3 - JUVENILE

Baby: Calf

The calf drinks its mother's milk for about 2 months.

STAGE 4 - ADULT

Total Life Span: 15 years









LIFE CYCLE OF A

HORSE

STAGE 1 - MATING

Male: Stallion // Female: Mare

A mare mates at 3 years of age.

STAGE 2 - GESTATION

1 year

STAGE 3 - JUVENILE

Baby: Foal

The foal drinks its mother's milk for about 1 year.

STAGE 4 - ADULT

Total Life Span: 25-30 years











Ranch Life Cycles



NAME:	DATE:

THE BOTTOM LINE

When you sequenced your life cycle cards you may have noticed patterns between the different life cycles.

Answer the questions below:

- 1. What patterns did you notice in the animal life cycles?
- 2. What were the main differences between the animal life cycles? Pick another animal you might find on Hank's ranch. Predict the stages of its life cycle and draw them below. Research the animal to see if you were right.
- 3. How was the insect life cycles different from the animal life cycles?
- 4. What was similar about the two insect life cycles you studied?
- 5. What might happen if one stage of a life cycle was disrupted? For example, if there was a drought what stage of a mosquito life cycle would be affected?

