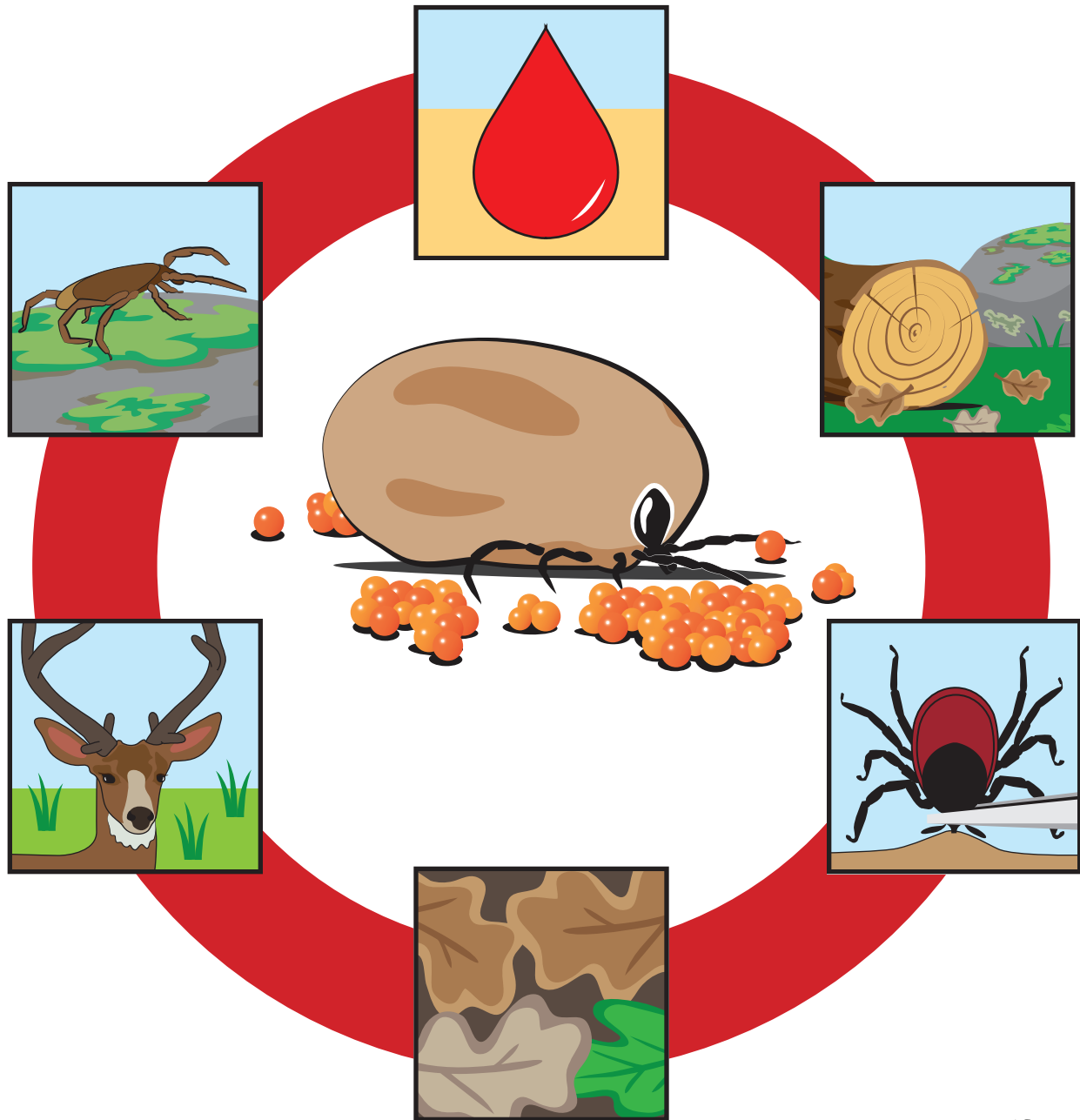


# Tick Biology & Safety Tips

## Activity Journal

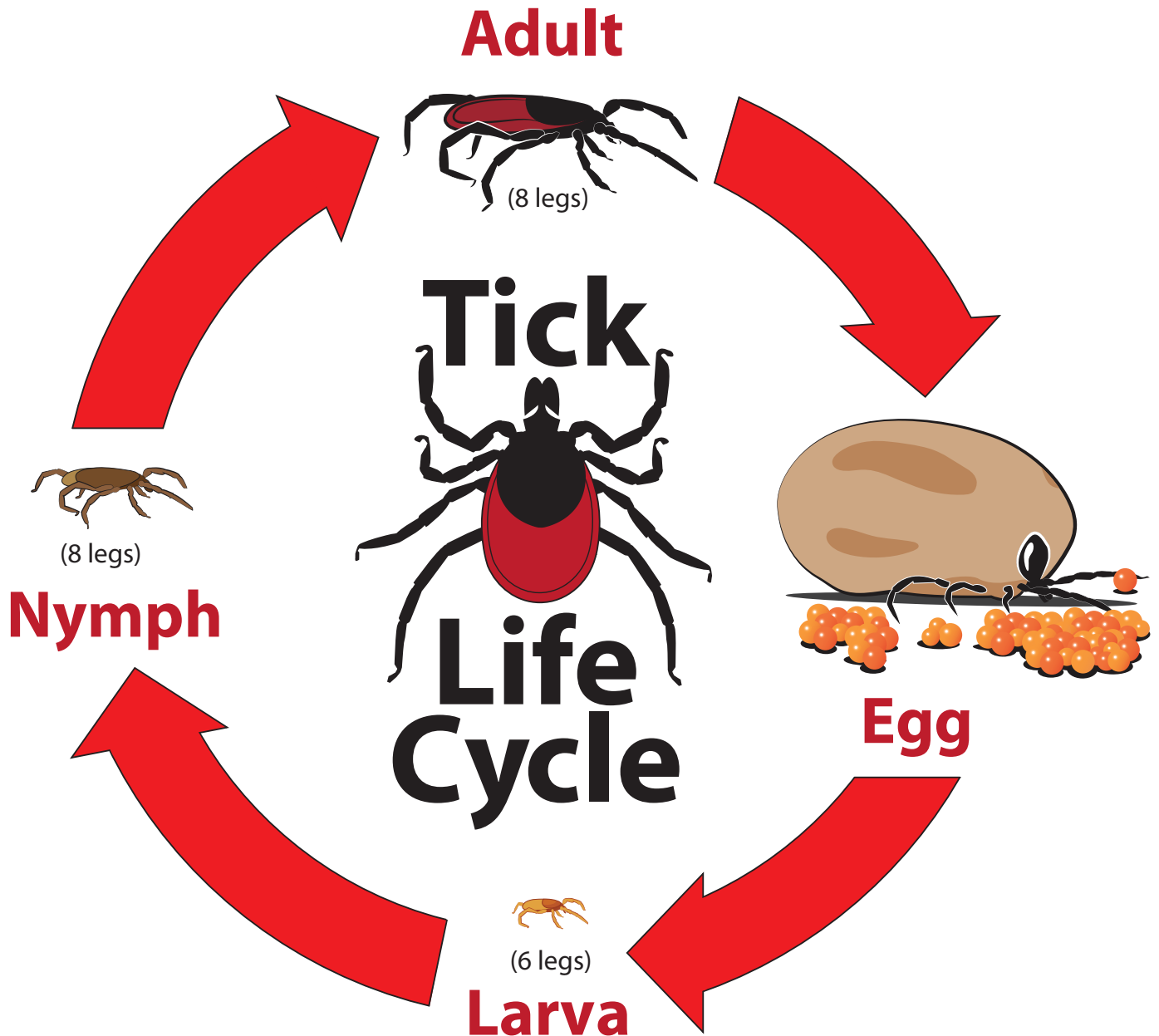


Name: \_\_\_\_\_



# Instructions

- Pages 1-4 will help you complete the activities on pages 5-7.
- Pages 9-10 are for making illustrations of ticks.
- This journal focuses mostly on the western black-legged tick—a common tick species in California known to spread diseases. Please note that there are other important species of tick in California.



- Ticks need blood from an animal (host) in order to grow, and adult females must fill with blood (engorge) before they can lay eggs.

# Tick Habitat & Hosts

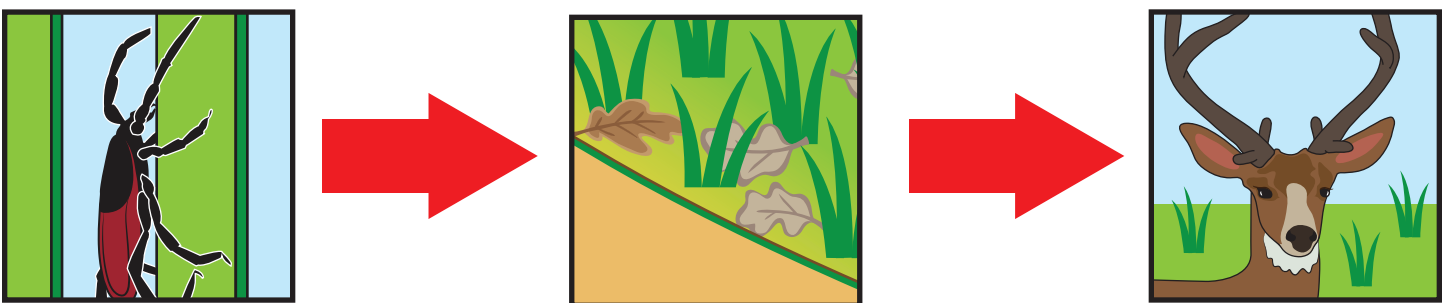
- Ticks cannot jump or fly, so they wait for a host to come close enough for the tick to climb onto.
- The pictures below show where each life stage is often found and the kinds of animals they typically bite.



A tiny 6-legged larva hatches from an egg. Larvae are often found in leaf litter. A larva waits to bite a small animal such as a rodent or bird that spends time near the ground (larvae typically do not bite people).



A small 8-legged nymph (about the size of a poppy seed) climbs up onto a mossy rock, log or tree trunk. It waits to bite an animal that is commonly found in these areas such as a lizard or rodent (nymphs will also bite people).





An 8-legged adult typically climbs up tall grass or other plant, often alongside a trail, and waits to bite a large animal that passes by (adults will also bite people).

# Tick Safety Tips

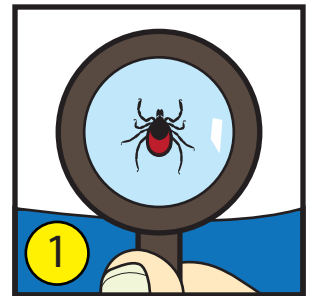
- Ticks are often found in natural areas people hike, play, work, or live.
- There are things you can do **before**, **during**, and **after** your visit to tick habitat to help protect yourself from ticks.

## Before your visit to tick habitat

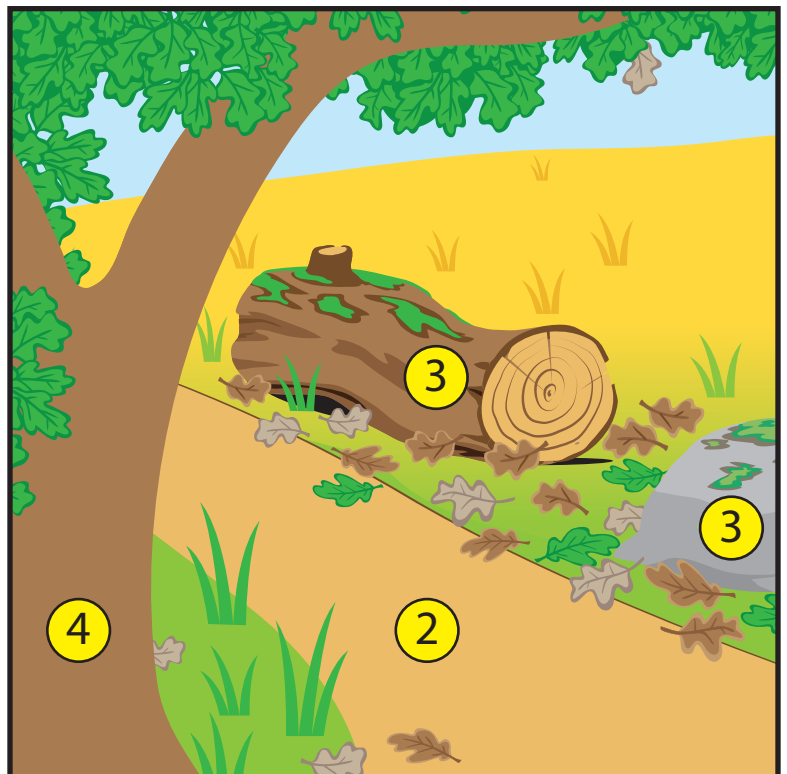
<p><b>Clothing:</b> Long pants and sleeves are best, and light colors will help you spot any ticks that climb on.</p>		<p>Talk to your parents about using tick repellent.</p>	
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## During your visit to tick habitat

- Look at the habitat in the picture and think about all the places where ticks could be. What could you do to stay safer from ticks if you were hiking here?



- 1 Check often for ticks!
  - 2 Stay in the center of the trail, and avoid narrow trails when possible.
  - 3 Nymphs are often found on mossy-covered rocks and logs, so think twice before sitting down on them!
  - 4 Climbing trees is fun, but nymphs are also found on tree trunks. Climb something that isn't in the middle of such great tick habitat!
- 3



# After you leave tick habitat



**Dry out those ticks!** When you get home, dry your clothes on high heat. The hot air will dry out and kill any ticks hiding in your clothes.



**Take a shower!** Showering is a good way to check your entire body for any unwanted 8-legged “hitch-hikers”!

## **If a tick is attached to you**

- Find an adult as soon as possible and have them read the following directions that were copied from: [www.cdc.gov/ticks/removing\\_a\\_tick.html](http://www.cdc.gov/ticks/removing_a_tick.html) (visit the site for more information and diagrams).

### **How to remove a tick:**

1. Use fine-tipped tweezers to grasp the tick as close to the skin’s surface as possible.
2. Pull upward with steady, even pressure. Don’t twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with tweezers. If you are unable to remove the mouth easily with clean tweezers, leave it alone and let the skin heal.
3. After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol, and iodine scrub, or soap and water.

### **Follow-up:**

- If you develop a rash or fever within several weeks of removing a tick, see your doctor. Be sure to tell the doctor about your recent tick bite, when the bite occurred, and where you most likely acquired the tick.

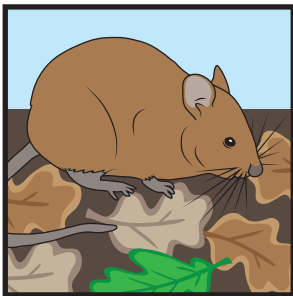
# Use the clues to fill in the blanks...

(The letters above the circled numbers will be used on page 7)



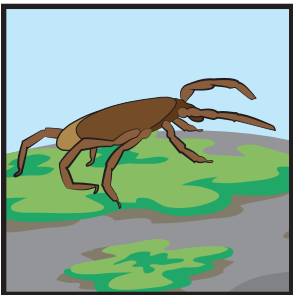
All ticks need this in order to grow and females need it before they can lay eggs...

\_\_\_\_ \_ 5 \_\_\_\_ o \_\_\_\_ \_



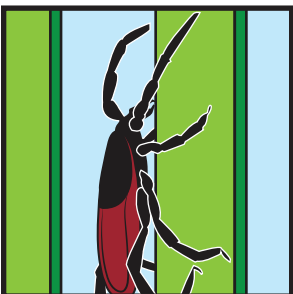
This tick life stage often waits in leaf litter to bite a rodent or other small animal...

\_\_\_\_ \_ a \_\_\_\_ \_ 11 \_\_\_\_ \_



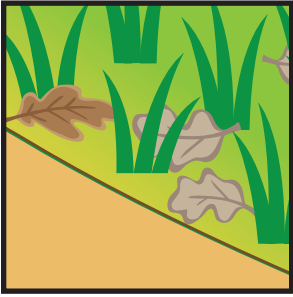
This tick life stage will bite people and is much smaller than an adult tick...

\_\_\_\_ \_ 9 \_\_\_\_ m \_\_\_\_ \_



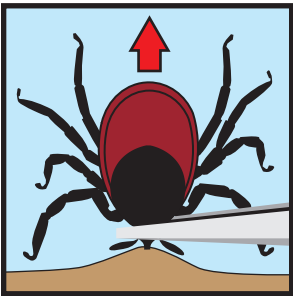
Ticks might be good at climbing, but they are not good at...

\_\_\_\_ \_ 1 \_\_\_\_ p \_\_\_\_ 3 \_\_\_\_ \_



This tick life stage often climbs up tall grass and waits for an animal (or hiker) to pass by....

\_\_\_\_\_ u \_\_\_\_\_  
⑦



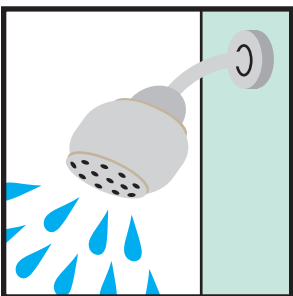
A useful tool for safely removing a tick...

\_\_\_\_\_ z \_\_\_\_\_  
⑩ \_\_\_\_\_ ⑧



After leaving tick habitat, it is a good idea to put clothes in the dryer on high...

\_\_\_\_\_ a \_\_\_\_\_  
⑥



A great way to find any ticks that may be on your skin is to take a...

\_\_\_\_\_ w \_\_\_\_\_  
② \_\_\_\_\_ ④



# Mystery Word Puzzle

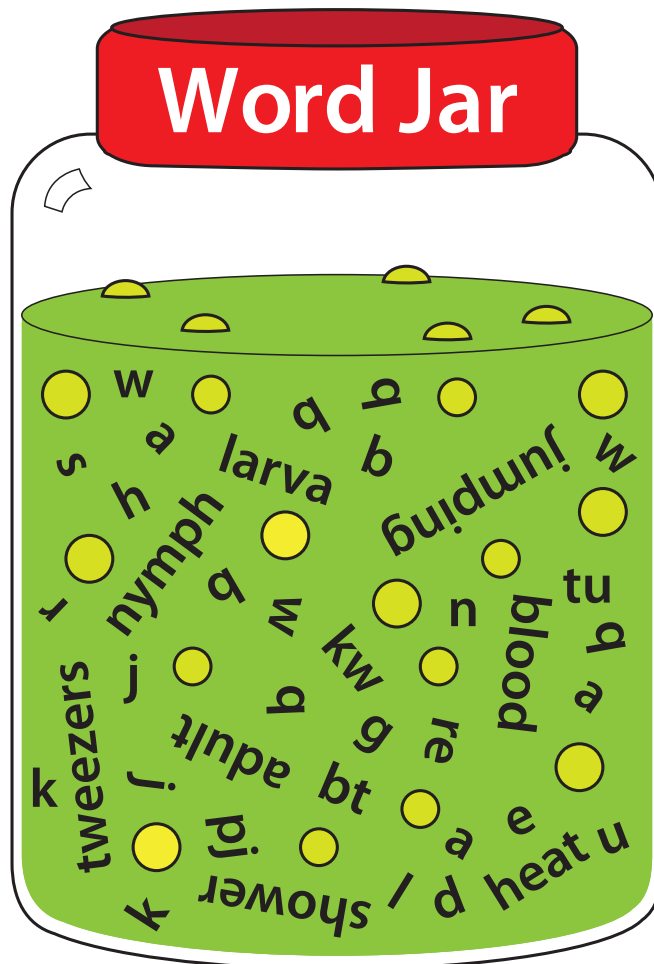


Use the letters above the circled numbers on pages 5 & 6 to fill in the blanks and solve the mystery word puzzle below.

**Mystery Word Puzzle Clue:** The most common disease that ticks spread to people in the United States...

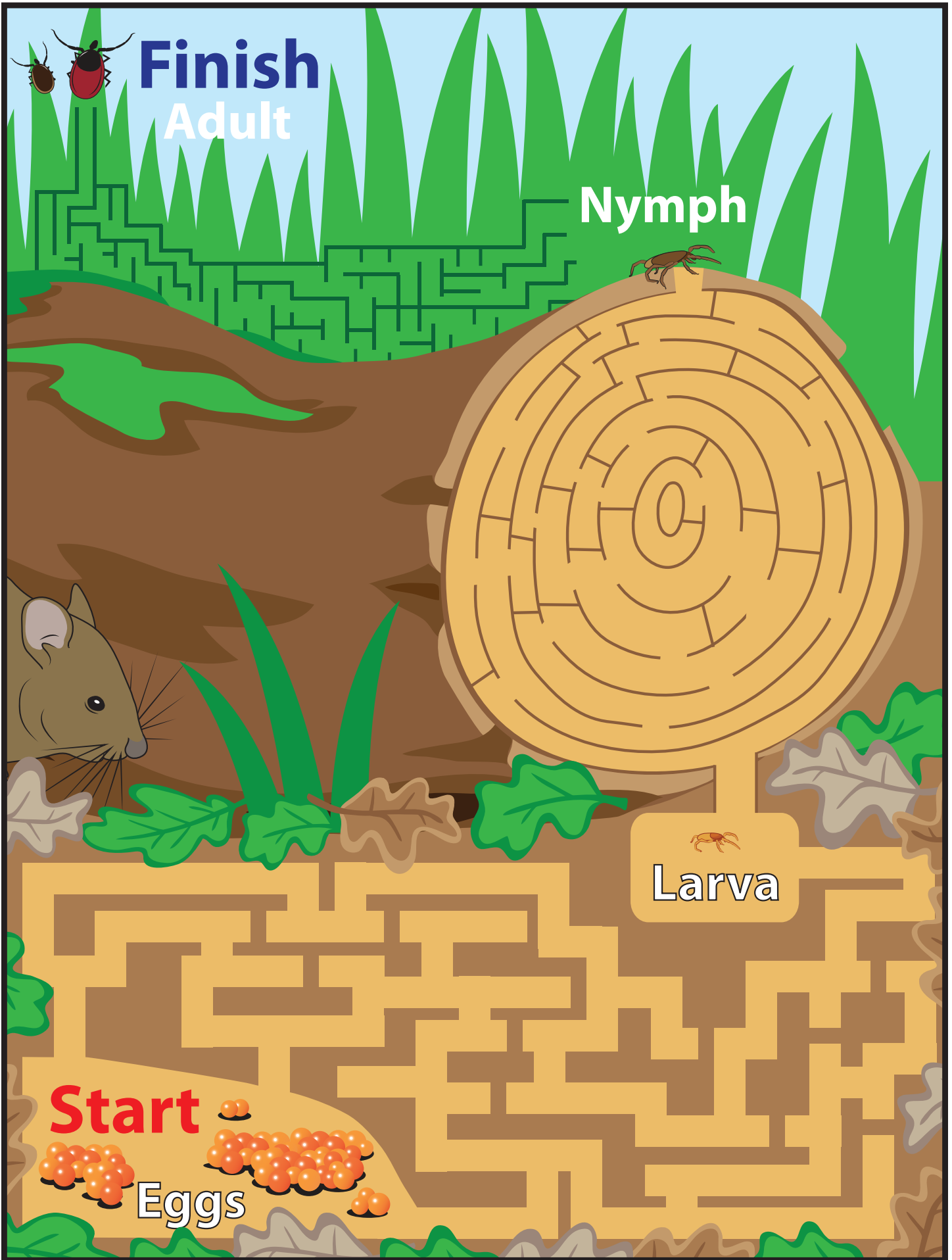
\_\_\_\_\_

(5) (9) (1) (6) (7) (3) (2) (10) (11) (8) (4)



\* If you can't figure out an answer on page 5 or 6, you might find some useful words hidden in this jar...





Take a journey with a tick through its life cycle from egg to adult! 8

These pages are for your tick illustrations. Make sure to include the habitat!



Dear parents,

Your child has been learning about ticks. This program teaches students to recognize habitats where ticks live and familiarizes students with the four stages of the tick life cycle. Students learn why ticks are dangerous and how they can protect themselves and their families from ticks.

Unfortunately, ticks can be more than just a nuisance. They are vectors, meaning that certain ticks have the ability to spread certain diseases such as Lyme disease and others. Please visit the Marin/Sonoma Mosquito & Vector Control District website at [www.ms mosquito.com](http://www.ms mosquito.com) for detailed information about ticks. The website also includes information related to:

- Free services available to residents of Marin and Sonoma counties
- Information about other vectors (such as mosquitoes, fleas, rats and yellowjackets)
- Information about vector-borne diseases (such as West Nile virus, Lyme disease, dog heartworm, and others)

Thank you,

Eric Engh  
Education Program Specialist  
Marin/Sonoma Mosquito & Vector Control District  
[erice@msmosquito.com](mailto:erice@msmosquito.com)



**Marin/Sonoma Mosquito & Vector Control District**  
call **1.800.231.3236** or **707.285.2200**  
or visit us online at [www.ms mosquito.com](http://www.ms mosquito.com)



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