

NetFrog Dissection

Name _____

Directions: Go to the **NetFrog** website at <http://frog.edschool.virginia.edu/> and choose *NetFrog 2002*. Click the “*Begin Dissection*” button to start. A link is also listed in the *Amphibians & Reptiles* section of the *Plants & Animals* page of the *Kid Zone* at <http://sciencespot.net/>.

SET-UP

1. What materials will you need for a dissection kit? _____

Guess What? → Where does the word “amphibian” come from? What does it mean? _____

2. Where should you place the pins to hold the frog in the pan? _____

Try It! → Read the information about pinning and then click the button to see if you can identify the four locations.

INCISIONS

1. Where should you make the first incision? _____

Next → Click the next button to proceed.

2. Where should you make the sideways incisions? _____

When you are making incisions, what do you have to be careful not to cut? _____

Guess What? → Why does a frog’s skin feel slimy? How does this help the frog? _____

3. What tool will you use to separate the skin from the muscle layer? _____

What should you do with the flaps of skin after you have separated them from the muscle? _____

Guess What? → How does countershading help a frog? _____

Click the *Try It!* button and see if you can find the right locations for making the three incisions.

4. What tool will you use to make the incisions in the muscle layer? _____

What do you need to avoid when you make the incisions through the abdominal muscle? _____

Guess What? → What are the three types of muscle tissue? _____

5. What tool will you use to cut through the chest bones? _____

Guess What? → How far can a frog jump? _____

6. Where should you make the two horizontal incisions through the muscles? _____

Guess What? → Do frogs have rib bones? _____

7. What tool will you use to separate the muscle from the organs below? _____

Guess What? → What are a frog’s ears called? _____

8. After you read the information on the triangular flaps, click the *Try It!* button and complete the activity.

Guess What? → How does a frog use its eyes when it eats? _____

ORGANS

1. *Guess What?* → What organ helps prevent a frog from freezing during hibernation? _____
2. What organs will you see first? _____
3. Where is the heart located in relation to the liver? _____
Guess What? → How many chambers does a frog's heart have? _____
4. What organs are located in layer 2? _____
Guess What? → How do frogs use their teeth? _____
5. Where is the gallbladder located? _____
Guess What? → How is the gallbladder used? _____
6. *Guess What?* → What is chyme? _____
7. *Guess What?* → What are the three parts in the small intestine? _____
8. *Guess What?* → _____ gas exchange is a process that animals with thin skin use to allow gases to pass right through their skin.
9. Where are the lungs located? _____
10. *Guess What?* → What type of proteins does the pancreas produce? _____
11. What organs do you need to remove to see layer four? _____
12. *Guess What?* → What does the spleen do? _____
13. *Guess What?* → How many liters of blood does it take to produce one liter of urine in a human? _____
14. Read the information about frog testes and then click the *Try It!* button. See if you can find these organs.
Guess What? → What is the name of the opening through which sperm and eggs pass? _____
15. Read the information about frog ovaries and then click the *Try It!* button. See if you can find these organs.
Guess What? → What organ holds the eggs in a female frog? _____
16. *Guess What?* → What is a tadpole's first meal? _____
17. *Guess What?* → What percentage of amphibians are frogs or toads? _____ %
18. What color is the spleen? _____ Hint: Look at the picture!
Guess What? → Why are frogs important to the environment? _____
19. Click the *Try It!* button to see if you can find the ovaries and oviducts.

CLEAN UP & REVIEW

1. What do you need to do to clean up after you do a dissection? _____ of the frog properly, rinse and dry all _____, including the _____, and put the dissecting pan and _____ away.
2. Click the link for the Quiz in the top right corner of the window to try the quiz questions. Work your way through the questions until you have completed the quiz.

Done? Visit the links in the Animal Games section of the Plants & Animals page of the Kid Zone at <http://sciencespot.net/>