

Student Activities Grades 4-6

Answer Key

Crossword Puzzle

Across: 1. speleothems, 2. fried egg, 3. draperies, 4. bacon, 5. helectites, 6. no, 7. cave coral, 8. totem pole, 9. calcite flower, 10. impurities, 11. manganese, 12. cave, 13. karst.

Down: 1. stalactite, 2. flowstone, 3. calcite, 4. column, 5. stalagmite, 6. soda straw, 7. rimstone dam, 8. oxide, 9. caver, 10. red clay, 11. spelunker, 12. sinkhole.

Where in the cave?

Entrance: raccoon

Twilight zone: bat, raccoon, harvestman, cave cricket

Total darkness: any and all shrimp and crayfish

Ceiling/walls: bat, harvestman, cricket

Water: crayfish, shrimp

Floors: raccoon, cricket

Who Doesn't Belong

The snake, turtle, and frog are animals not found in a cave.

Limestone Match Up

1. d 2. b 3. c 4. a

Animal Match Up

Troglobite: flatworm, centipede, blind millipede, blind cave shrimp, isopod, amphipod

Troglophile: harvestman, cave cricket, regular crayfish

Trogloxene: bat, raccoon

Speleothem Match Up

Clockwise from upper right corner: drapery, helectite, gypsum flower, stalagmite, rimstone dam, flowstone, totem pole, soda straw, stalactite, and column.

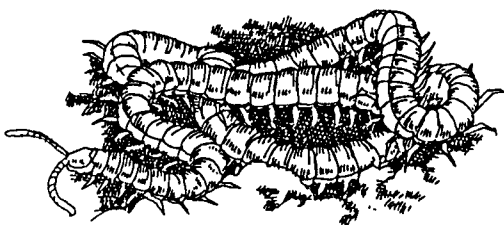
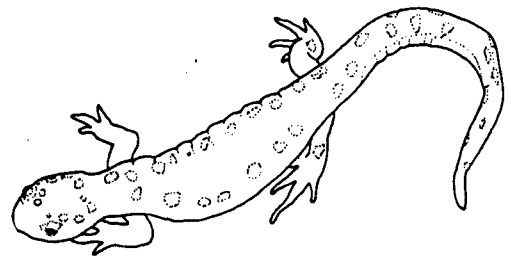
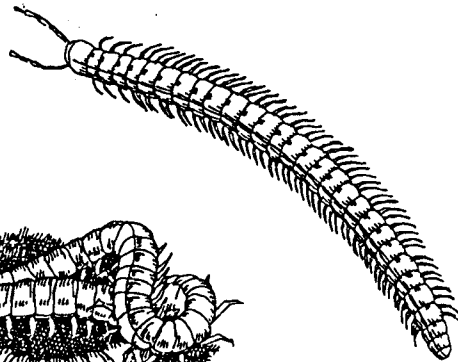
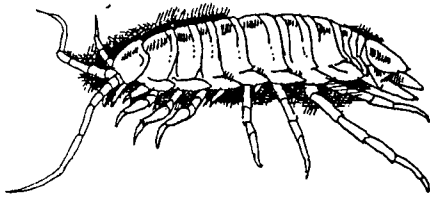
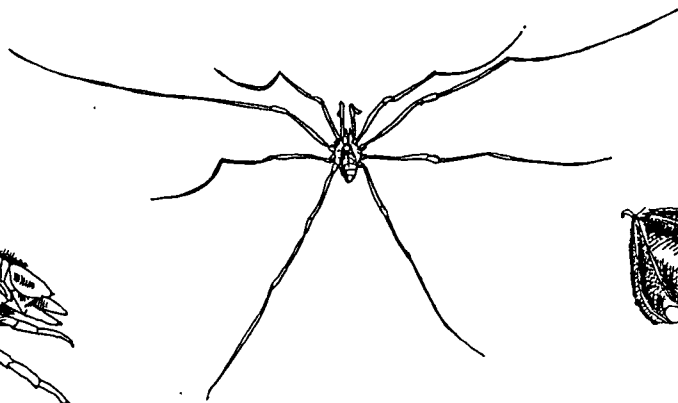
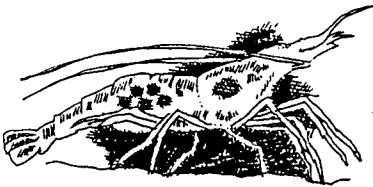
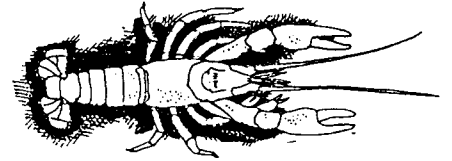
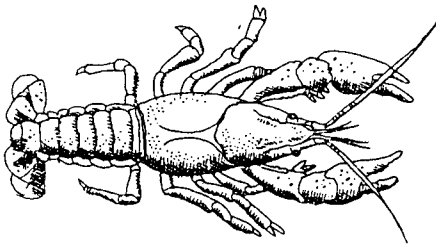
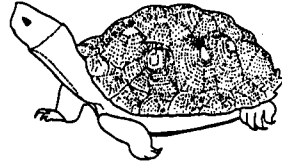
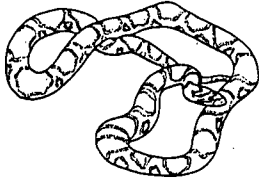
Bat Test

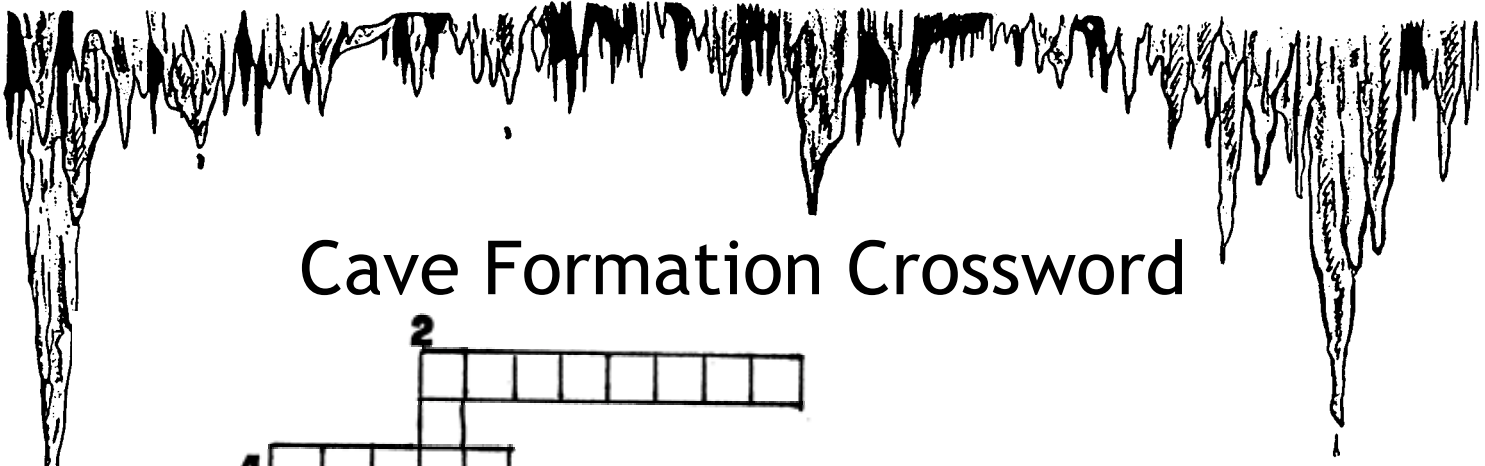
True: 4, 6, 7, 8, 9, 10, 11, 12, 13, and 15

False: 1, 2, 3, 5, and 14

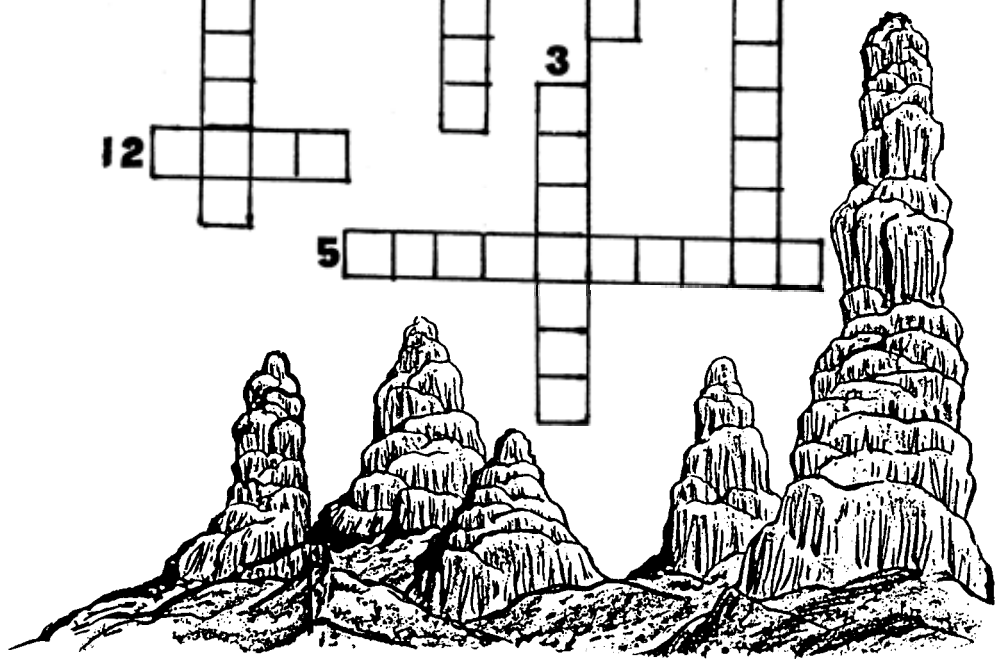
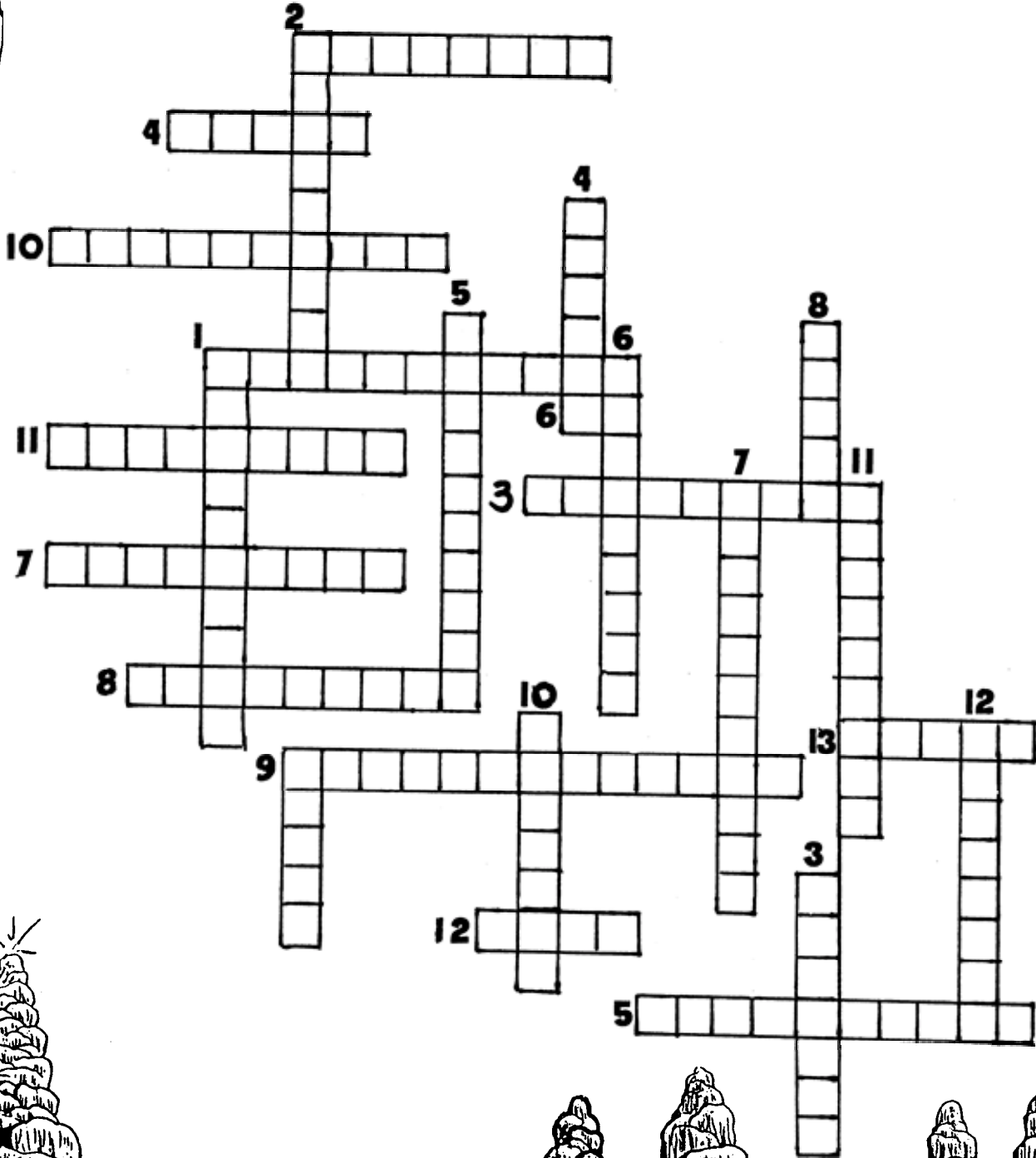
Who Doesn't Belong?

Cross out or put an "X" on the animals that can not be found in a cave.





Cave Formation Crossword





Cave Formation Crossword

Words to choose from:

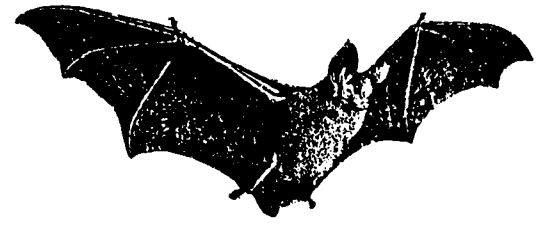
bacon	no	spelunker	helectites	manganese
totem pole	draperies	oxide	fried egg	water
speleothems	rimstone dam	stalagmite	calcite	limestone
karst	column	flowstone	cave	sinkhole
impurities	caver	red clay	calcite flower	

ACROSS:

1. A general term for cave formations.
2. An unusual formation formed by a change in mineral composition (hint: it goes with bacon!).
3. Forms when water trickles down the underside of a ledge.
4. Another term for draperies is “cave _____”.
5. Small, twisted formations that seem to defy gravity.
6. The opposite of yes.
7. Irregular clusters that look like grapes of popcorn.
8. Unusual tall and thin stalagmites.
9. Formations that grow beneath the surface of a rimstone pool.
10. Causes cave formations to have different colors.
11. A mineral in the soil that causes the speleothems to be grey or black is _____.
12. A natural underground chamber with an opening to the surface.
13. A limestone region where drainage of rainwater through sinkholes creates caves.

DOWN:

1. Speleothems that grow down from the ceiling.
2. Forms when water flows over walls and deposits sheets of calcite.
3. Speleothems mainly consist of this material.
4. A solid pillar of stone from the floor to ceiling.
5. Grows up from the ground; position determined by falling water.
6. Fragile “baby stalactites”.
7. Step-like terraces that enclose pools of water (two words).
8. Most common cave colors are shades of brown and rust, which comes from iron _____ in the soil.
9. A person who explores caves.
10. High concentration of iron oxide in the _____ above a cave would account for the unusual red colors in some formations.
11. Another term for a caver.
12. A funnel-shaped depression in the earth’s surface.

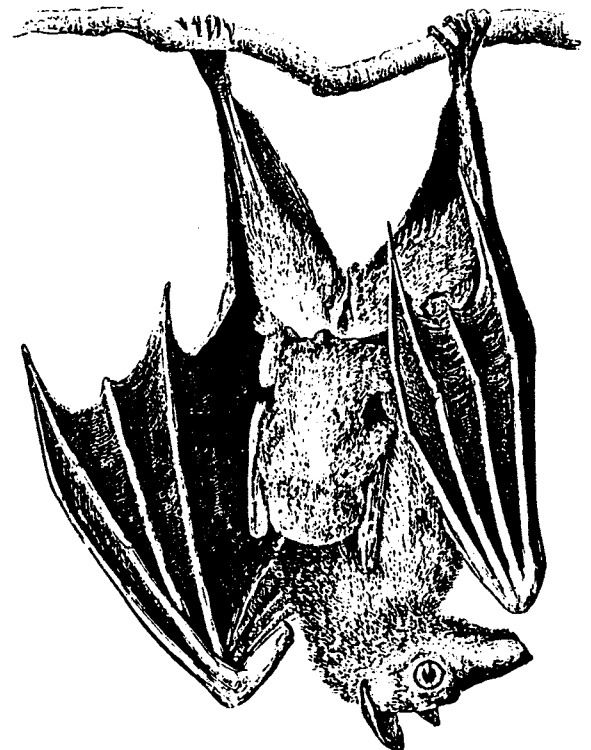


Take the Bat Test!

This is a pretest... to be given *before* bats are discussed in class, to determine how many “myth” conceptions your students have about bats.

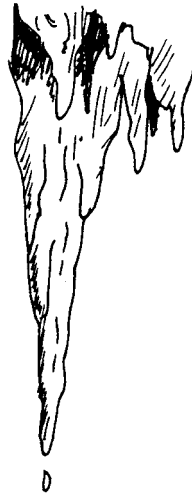
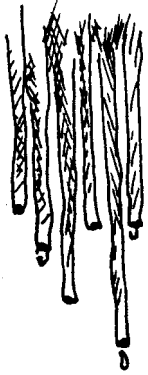
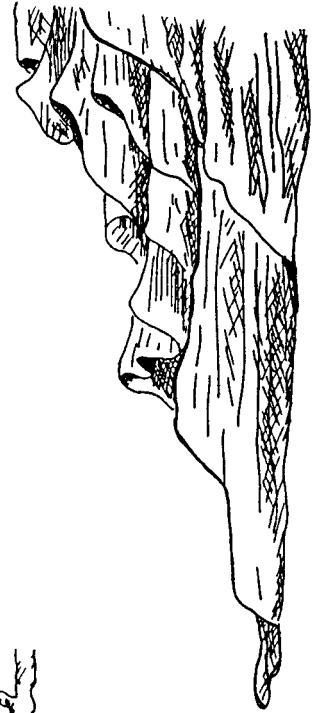
Mark each statement T (true) or F (false).

- 1. Bats are blind.
- 2. Bats are creepy little flying mice.
- 3. A bat is a rodent.
- 4. A bat's wing goes from the forearm to the rear of the body.
- 5. Bats like to get in girl's hair.
- 6. A bat is a flying mammal.
- 7. A bat diet consists largely of insects.
- 8. Bats are gentle, intelligent animals.
- 9. Bats have keen hearing.
- 10. Bats are not blind, and see quite well.
- 11. Bats use “echolocation” to catch their prey.
- 12. Bat droppings (guano) are important to caves.
- 13. Many bats in Indiana are endangered.
- 14. All bats live in caves.
- 15. Some bats are as large as small dogs.

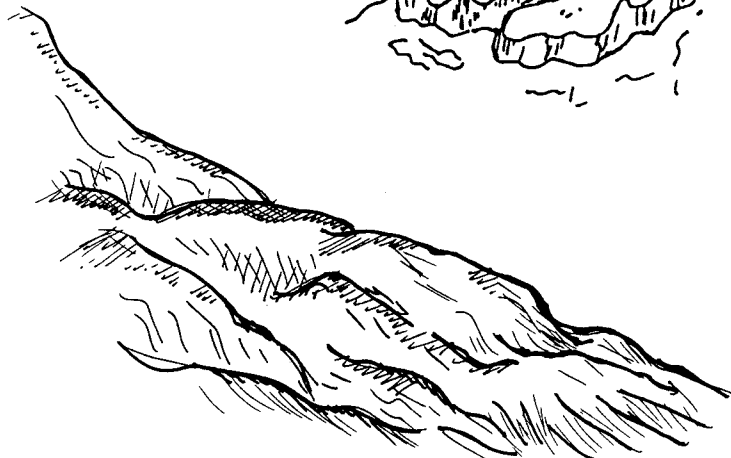
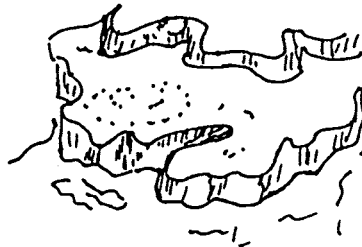
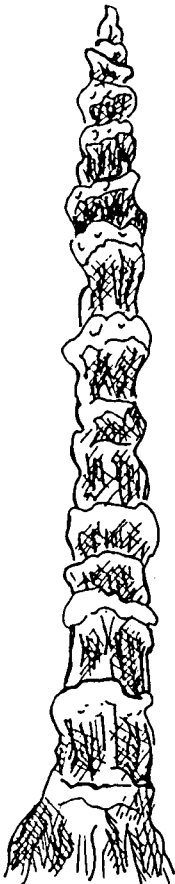


Speleothem Match Up

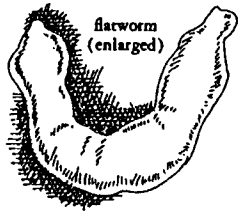
Draw a line connecting the name of each "speleothem" to its correct picture.



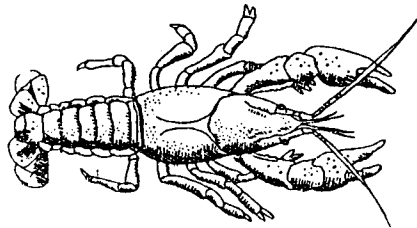
- rimstone
- drapery
- column
- cave coral
- flowstone
- helectite
- soda straw
- stalagmite
- stalactite
- gypsum flower



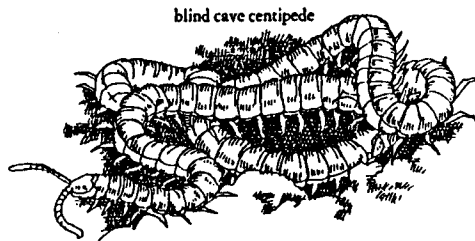
Animal Match Up



flatworm
(enlarged)



isopod

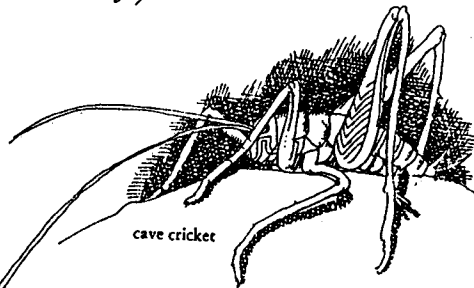


blind cave centipede

TROGLOBITE
cave dweller

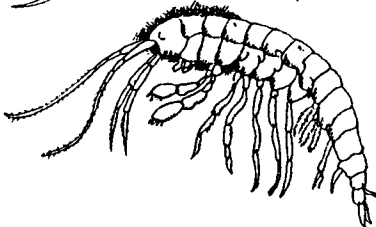


isopod

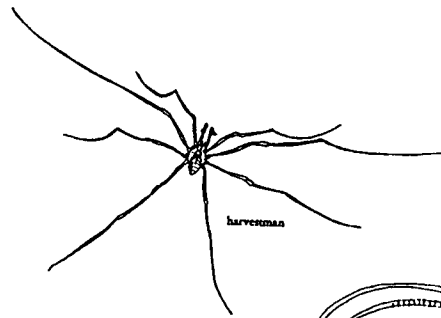


cave cricket

TROGLOPHILE
cave lover



amphipod

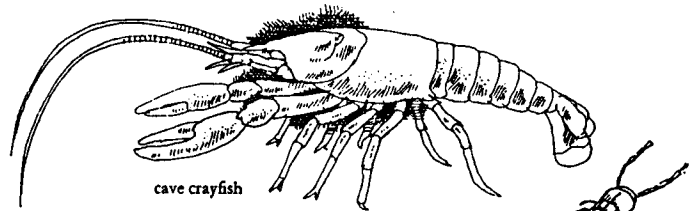


harvestman

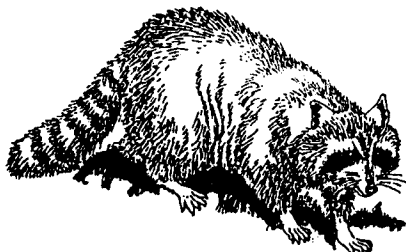
TROGLOXENE
cave visitor



blind cave shrimp,

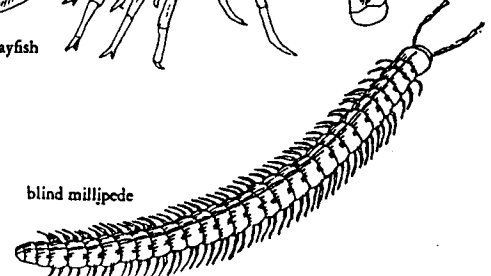


cave crayfish



raccoon

blind millipede



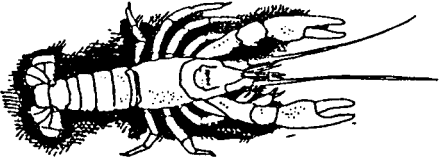
Autobiography of a Bat



Bats are fascinating, but greatly misunderstood creatures. Based on what you have learned from “Bats need friends”, pretend you become an Indiana, cave dwelling, bat for one day. Record what happens during that 24 hour period!

Where in the Cave?

Draw a line from each animal to the part of the cave where it can be found, for example: the twilight zone, entrance, or deep in the cave. You may even wish to show where the animal lives within each area - the ceiling, wall, or in the water.



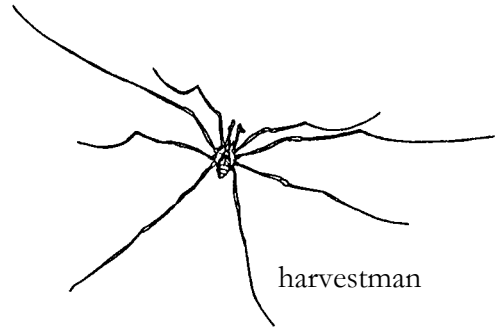
white crayfish
from the dark, inner



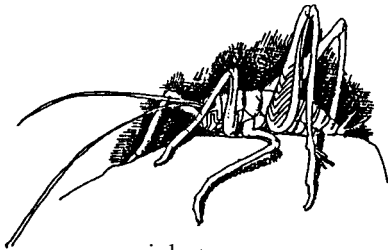
little brown bat,
a regular visitor



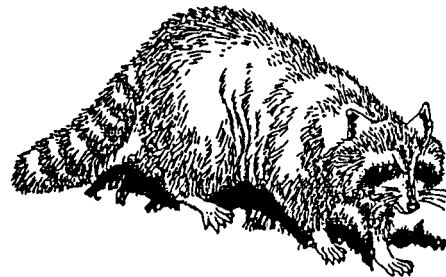
blind cave crayfish,
a permanent resident



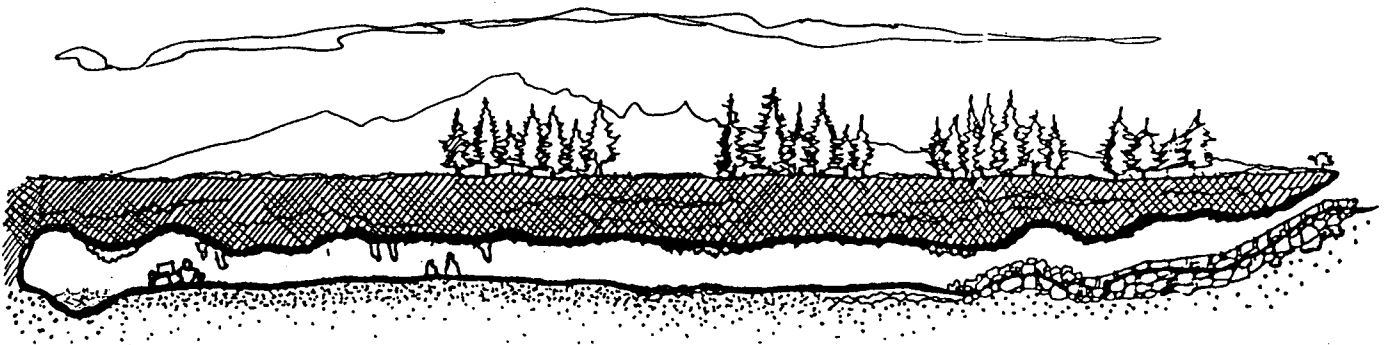
harvestman



cave cricket



raccoon,
a casual or
occasional visitor



Limestone Cave Formation Match Up

- A. Limestone continues to dissolve, forming more passages and chambers. Ceiling collapse enlarges the cave as well.
- B. Cracks and fissures enlarge further, forming passages and rooms.
- C. The water table has dropped. Dripping water in the cave forms speleothems in the walls, floors, and ceilings.
- D. Water seeping and running through limestone enlarges cracks and fissures.

