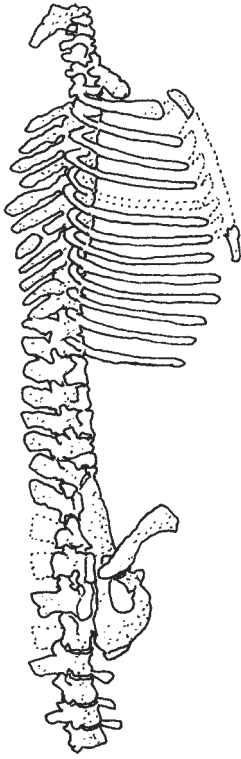
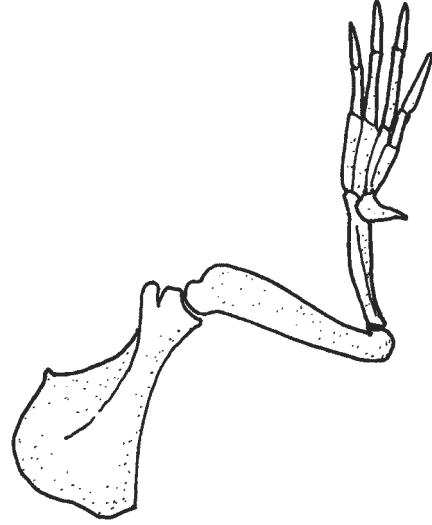


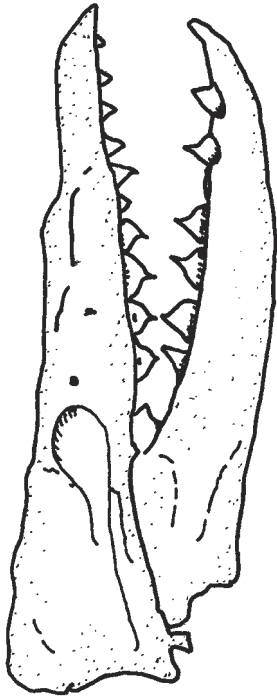
MYSTERY FOSSIL BONES: SPINE, NECK, & RIBS



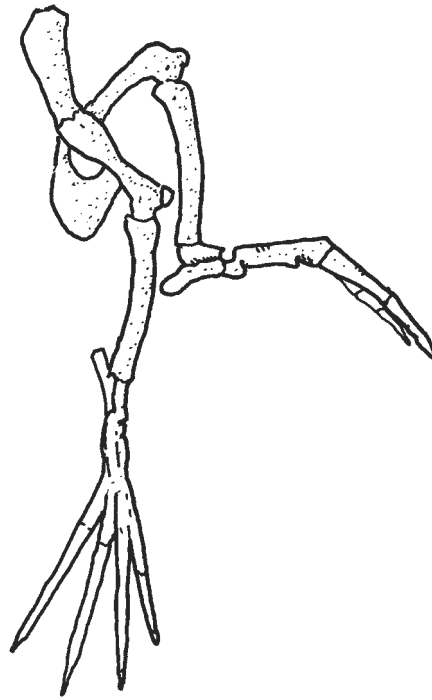
MYSTERY FOSSIL BONES: FORE LIMBS



MYSTERY FOSSIL BONES: SKULL & TEETH



MYSTERY FOSSIL BONES: HIND LIMBS



SKULL & TEETH: Some Known Bones

CHALLENGE:

FIND THE MODERN SKULL AND TEETH MOST LIKE THE MYSTERY FOSSIL BONES.

1. Get the card "Mystery Fossil Bones: Skull and Teeth."
2. Compare the mystery skull and teeth to the bones of modern animals shown on this page.
3. Which skull and teeth do you think are most like the Mystery Fossil Bones?

4. List the clues that helped you decide:

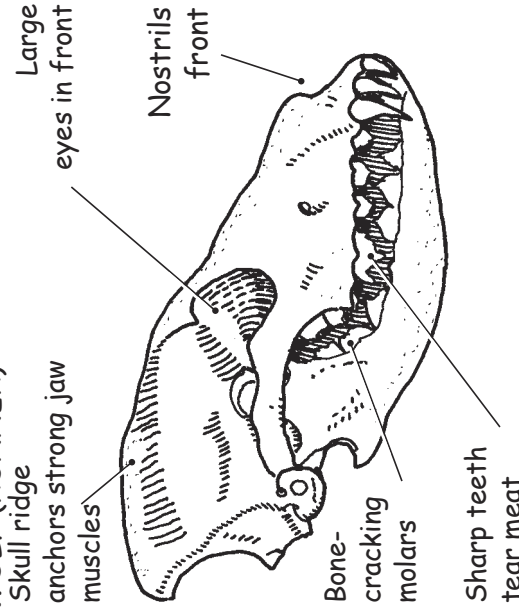
5. Based on the bone clues, what type of critter did the Mystery Fossil Bones belong to?

An animal's skull acts like a hard hat to protect its brain. Sharp teeth are suited for tearing into flesh; flat teeth are better for grinding plant foods. Animals with large eye sockets pointing ahead have good forward vision while eyes to the sides are better for seeing all around.

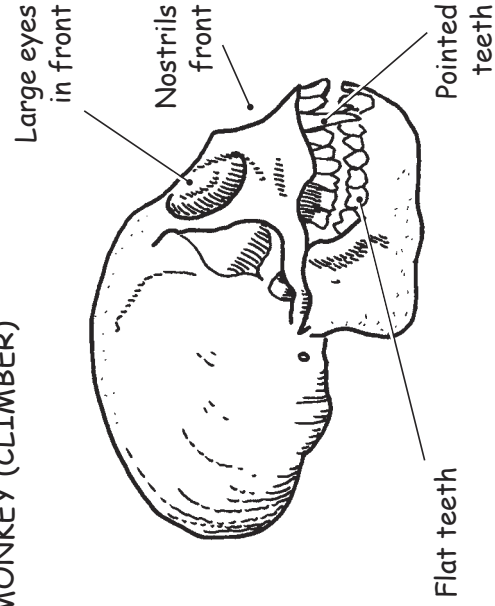
- Wolves use their forward-pointing eyes and nose for hunting. Sharp teeth stab and hold prey.
- Monkeys use their keen eyes and nose for finding food. They use their diverse teeth to eat a mixed diet.
- Dolphins breathe at the water's surface from nostrils on top of their head.

Note how the shapes of the bones give clues to an animal's lifestyle.

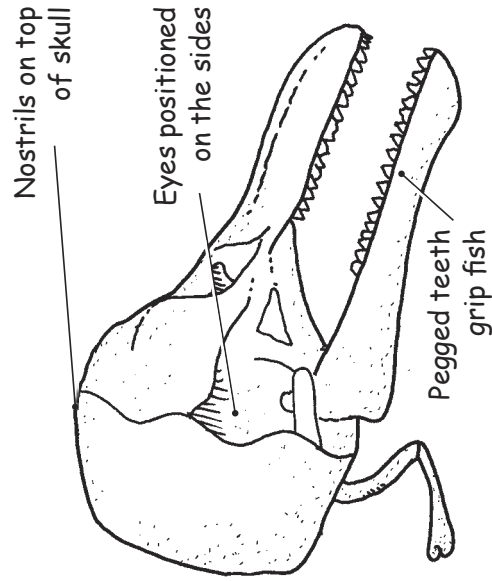
WOLF (RUNNER)



MONKEY (CLIMBER)



DOLPHIN (SWIMMER)



FORE LIMBS: Some Known Bones

CHALLENGE:

FIND THE MODERN FORE LIMBS MOST LIKE THE MYSTERY FOSSIL BONES.

1. Get the card "Mystery Fossil Bones: Fore Limbs."
2. Compare the mystery fore limbs to the bones of modern animals shown on this page.
3. Which fore limbs do you think are most like the Mystery Fossil Bones?

4. List the clues that helped you decide:

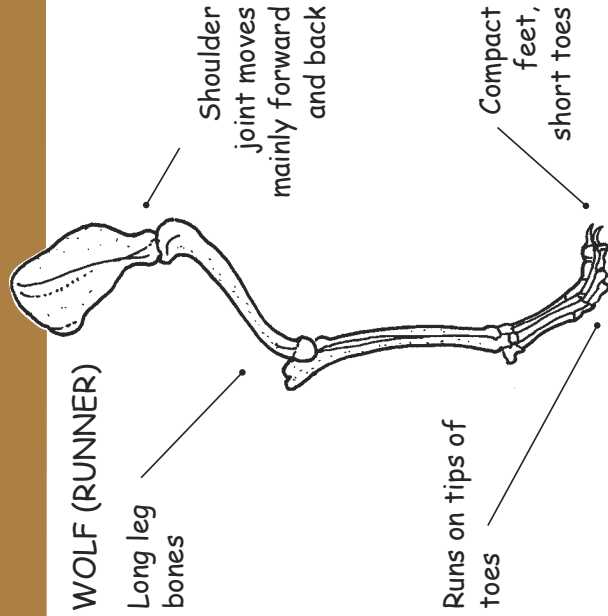
5. Based on the bone clues, what type of critter did the Mystery Fossil Bones belong to?

Animals often use their fore limbs or front legs for specialized jobs like digging, paddling, and grabbing. Their back legs are mainly used for locomotion. Notice how different animals use their fore limbs in different ways:

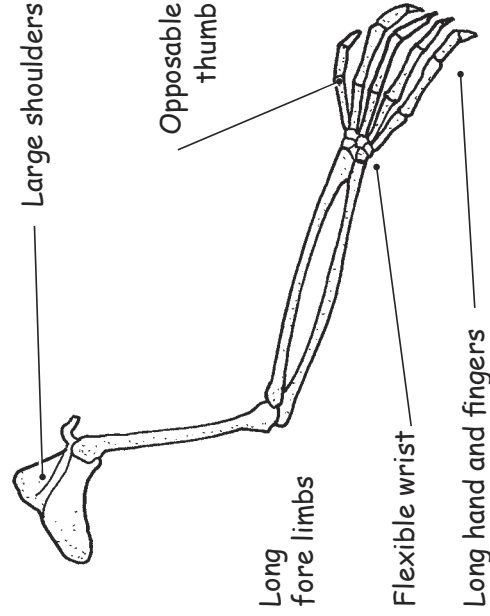
- Wolves run on their long legs and compact feet.
- Strong shoulders support their body weight.
- Monkeys swing through trees with their long arms and grasping hands.
- Dolphins swim using their flippers as paddles.

Note how the shapes of the bones give clues to an animal's lifestyle.

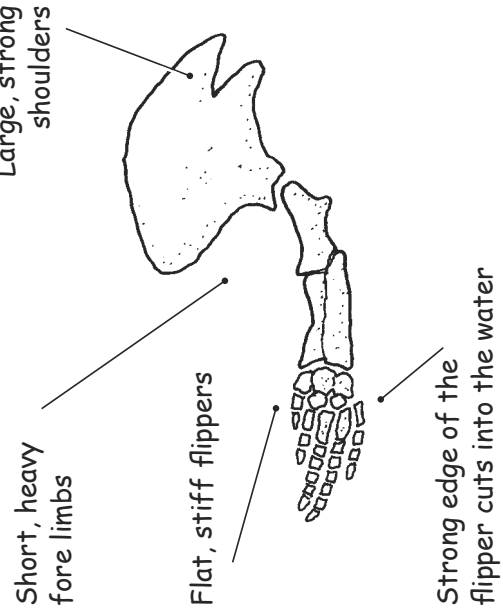
WOLF (RUNNER)



MONKEY (CLIMBER)



DOLPHIN (SWIMMER)



Linda Allison illustration.

HIND LIMBS: Some Known Bones

CHALLENGE:

FIND THE MODERN HIND LIMBS MOST LIKE THE MYSTERY FOSSIL BONES.

1. Get the card "Mystery Fossil Bones: Hind Limbs."
2. Compare the mystery hind limbs to the bones of modern animals shown on this page.
3. Which hind limbs do you think are most like the Mystery Fossil Bones?

4. List the clues that helped you decide:

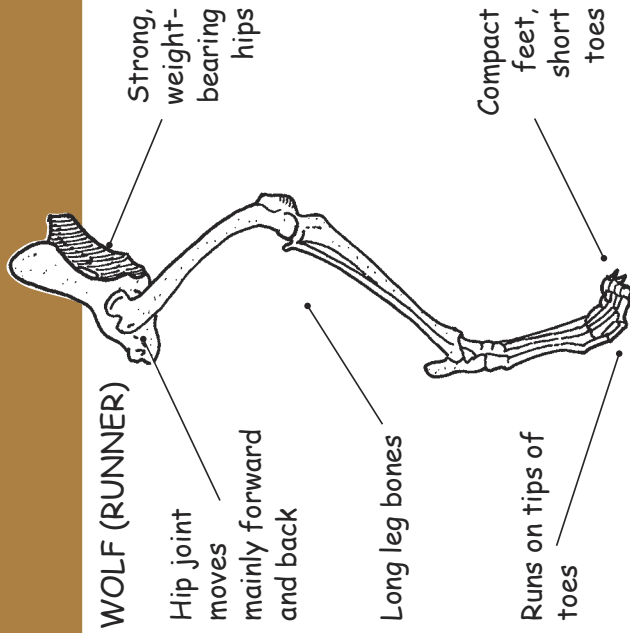
5. Based on the bone clues, what type of critter did the Mystery Fossil Bones belong to?

Animals use their hind limbs or legs mostly for locomotion. Their front legs are often used for more specialized jobs like digging, paddling, or grabbing. Notice how different animals use their hind limbs:

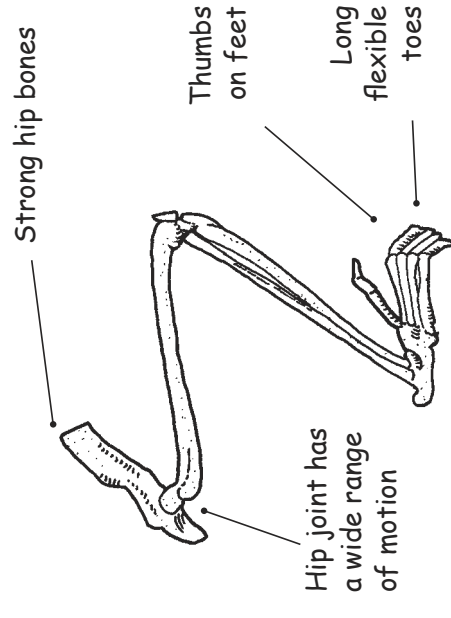
- Wolves run on their long legs and compact feet. Strong hips support their body weight.
- Monkeys swing through tree branches with their long legs and grasping feet.
- Dolphins swim through water with their streamlined bodies. They lack legs.

Note how the shapes of the bones give clues to an animal's lifestyle.

WOLF (RUNNER)

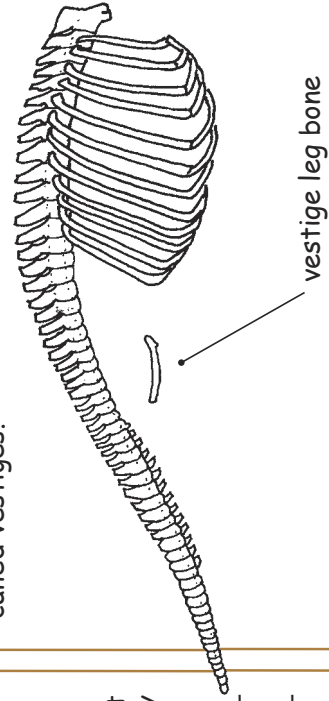


MONKEY (CLIMBER)



DOLPHIN (SWIMMER)

Dolphins have no hind legs on the outside, but their skeletons have tiny, useless leg bones called vestiges.



SPINE, NECK, & RIBS: Some Known Bones

CHALLENGE:

FIND THE MODERN SPINE, NECK & RIBS MOST LIKE THE MYSTERY FOSSIL BONES.

1. Get the card "Mystery Fossil Bones: Spine, Neck, & Ribs."
2. Compare the mystery spine, neck, & ribs to the bones of modern animals shown on this page.
3. Which spine, neck, & ribs do you think are most like the Mystery Fossil Bones?

4. List the clues that helped you decide:

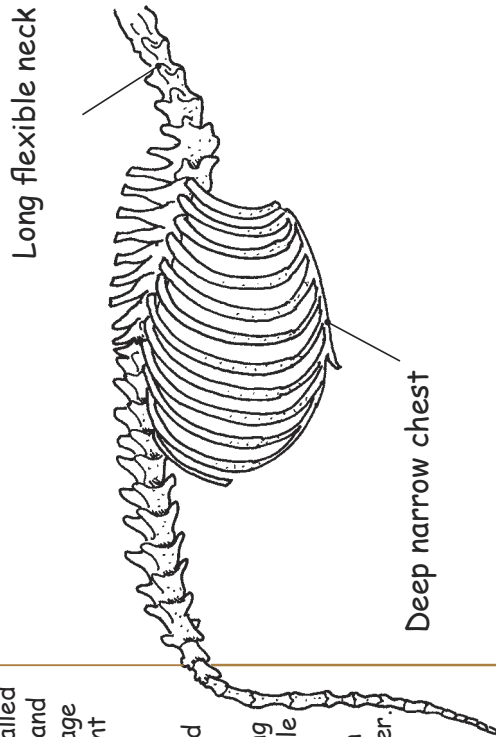
5. Based on the bone clues, what type of critter did the Mystery Fossil Bones belong to?
- _____
- _____
- _____

An animal's spine acts as a rod from which the other bones are hung. It is made of sections called vertebrae that form a strong, flexible support and provide anchors for the muscles. Ribs form a cage to protect heart and lungs. Notice how different animals use the spine in different ways:

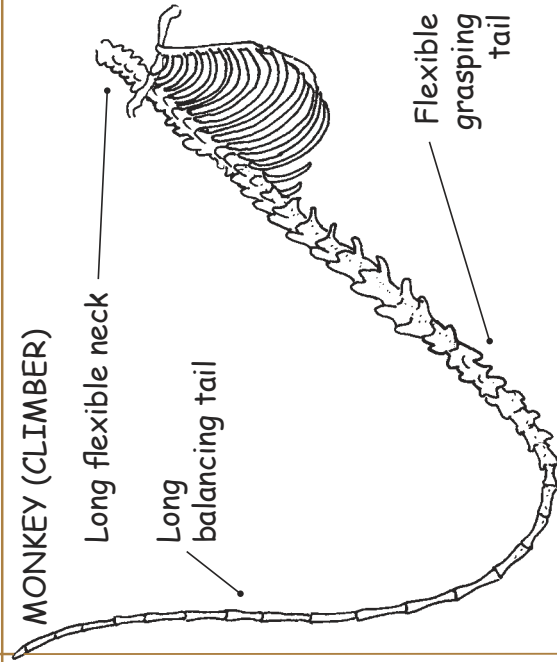
- Wolves use their long necks to move the head for better sight, smell, and hearing.
- Monkeys travel through trees using their long tails for grabbing and balancing. Their flexible necks aid their keen vision.
- Dolphins swim using their powerful tails in an up and down motion to push through the water.

Note how the shapes of the bones give clues to an animal's lifestyle.

WOLF (RUNNER)



MONKEY (CLIMBER)



DOLPHIN (SWIMMER)

