HOW DO I MOVE? WHERE DO I LIVE?

Use the information below to work out how these animals move. Can you also work out where these animals might live?

Mammals move in a variety of ways including flying (bats), swimming (whales), running (horses), gliding (flying squirrels), jumping (kangaroos), and digging (moles). The whole body of the animal is adapted to the way they move, and the way an animal moves is often linked to where it lives. For example, horses live on large open plains so they are adapted to run really fast to avoid predators in these big open environments.

How can you tell how an animal moves or where it lives just by looking at the skeleton?

Easy, look at their general body shape, their limbs and their muscle attachments. Note that when muscles develop, they need to be attached to the bones. So when an animal has a large powerful muscle, the bones it is attached to develop big **flat** or **crested surfaces** on the body.

Animals that **jump** need **powerful hind legs** but often have reduced front legs as these are not needed in jumping. Jumping animals also generally have **long tails** for balance. Jumping animals mainly live on the ground, because this is the most effective place to jump.

Animals that **dig** need powerful front limbs shaped like **shovels** to remove the soil. They also generally have a **streamlined shape** to help them move through the earth. Because they dig these animals often live in burrows underground. Animals that live underground are **fossorial**.

Animals that **climb** need powerful arms to pull themselves up trees, with **grasping hands** and feet to hold onto to branches. Climbing animals often also have long claws for grip and long tails for balance. Some have **prehensile** tails, which means they can use them as an extra limb to grab onto branches. Many climbing animals live in trees. Animals that live in trees are **arboreal**.

Animals that are **fast runners** usually have very muscular upper legs. They also have very **long limbs** because this makes their **stride** longer. The longer the stride, the fewer strides are needed to cross a given area so the animal is faster. Often fast runners will have **elongated fingers/toes** (e.g. the hoof of a horse is its toe) to make their stride even longer. Some fast runners like cheetahs also use an **elastic curved spine** to stretch their stride further. Animals that run fast are **cursorial** and tend to live in open areas where fast running is useful for catching prey or avoiding predators.