

## Sandy Shore Scavenger Hunt

Sand fleas or beach hoppers are any of more than 60 terrestrial crustaceans of the order Amphipoda that are notable for their hopping ability. They live on sandy beaches near the high-tide mark, remaining buried in the sand during daytime and emerging at night to forage for food. How many can you find in within a circle the size of a hula hoop?



Sand crabs (*Emerita analoga*) burrow in the sand in the swash zone. Don't fear ... they cannot pinch. These crabs are filter feeders. They bury themselves in the sand in the area of breaking waves, leaving their eyes and antennae above the ground. Draw one in the space provided:



Snowy plovers (*Charadrius nivosus*) are small shorebirds that dash in and out of waves at the beach. While it looks like they are playing, these chunky little white birds are actually chasing after a meal of small insects and crustaceans. It breeds in Ecuador, Peru, Chile, the southern and western United States and the Caribbean. Describe the flurry of their activity below - perhaps in the style of a poem:



The term sand dollar refers to species of extremely flattened, burrowing sea urchins belonging to the order Clypeasteroidea. Some species within the order, not quite as flat, are known as sea biscuits. The familiar exoskeleton of a sand dollar—often found cast up on a beach—is white, with small grooves on one side with a hole in the center. But a live sand dollar has a different look. Densely packed, tiny spines cover the exoskeleton.



The aggregating anemone (*Anthopleura elegantissima*), or clonal anemone, is the most abundant species of sea anemone found on rocky, tide swept shores along the Pacific coast of North America. Keep in mind anemones need something to attach to so you will find these along the margins on rocky outcroppings. Draw an anemone in the space provided:



Washed up on shore you might also find bull kelp (*Nereocystis luetkeana*), the dominant species in offshore kelp forests along the Oregon Coast. Kelp have a similar but not identical physical structures to terrestrial plants. For example, a holdfast anchors them to the ocean floor but it does not collect nutrients like the roots of a terrestrial plant would. They also have a stem-like structure called a stipe from which leaf-like blades stretch out through the water, absorbing nutrients and sunshine. Below the blades is an air-filled bladder called a float that helps hold the plant upright in the water. Draw a bull kelp below and label the parts.

