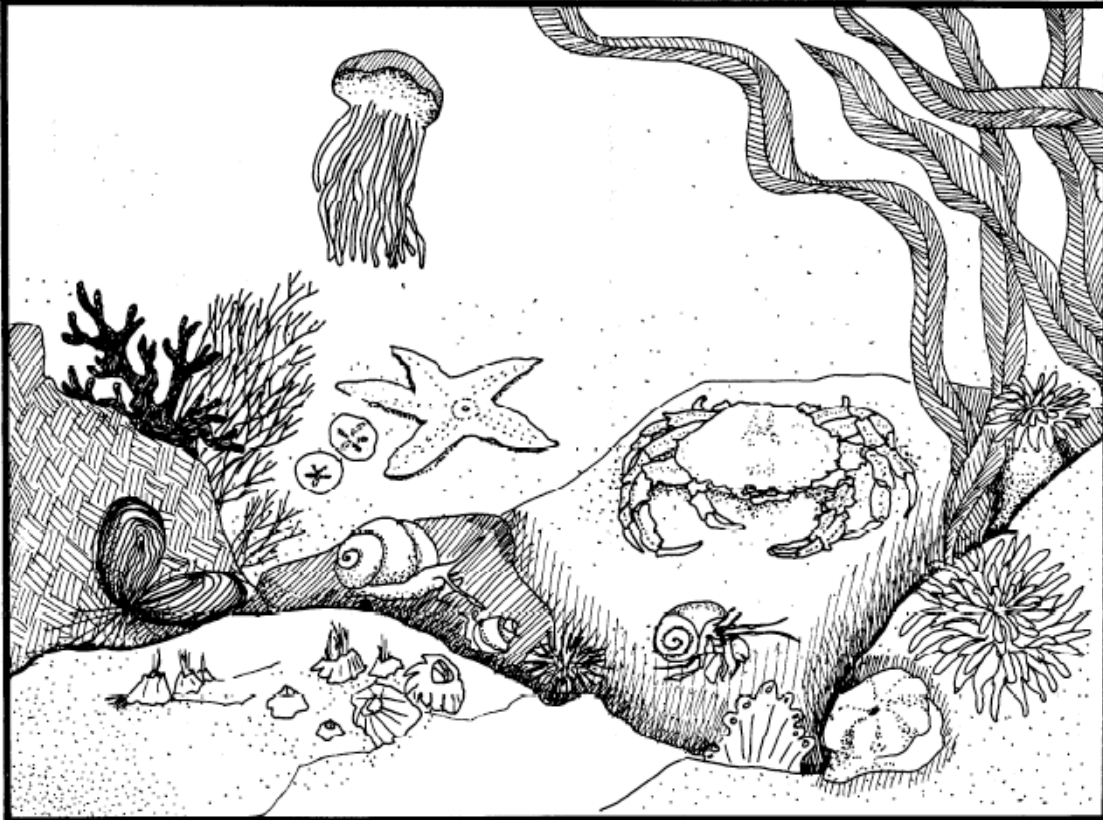


## Marine Invertebrate Species



### Sponges



In Alaskan waters, sponges are primarily subtidal, but some may be found in the intertidal zone. Intertidal sponges usually are inconspicuous, encrusting species growing under ledges, in crevasses, on rocks and boulders. Shades of green, yellow, orange and purple predominate, but other colorations may be found. Sponges have been largely unchanged for 500 million years. Because they taste bad, they have few natural enemies. Some sponges shelter other organisms in their internal cavities.

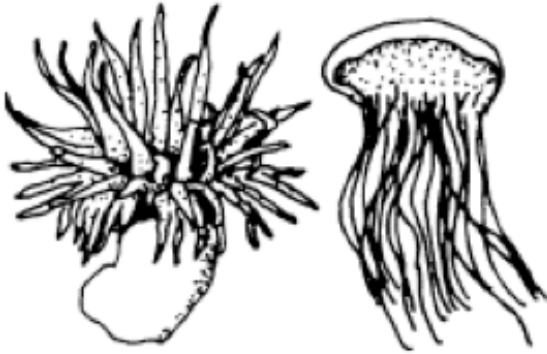
If an intertidal sponge is examined with a magnifying glass, its scattered incurrent and excurrent openings can be seen. Flagellated cells draw sea water into the sponge mass through small incurrent openings. The sea water passes along internal passages and exits the sponge through the larger excurrent openings, which resemble volcanic craters. Inside the sponge mass, the flagellated cells along the passages capture microscopic bits of food from the passing water. Sponges are given shape and texture by fibers and tiny, often elaborate siliceous or calcareous structures called “spicules. Biologists use the size and

shape of these spicules to identify sponge species.

Some sponges have a distinctive form, which may resemble vases, fingers or balls; but others are amorphous. Sponges produce larvae that drift for a time in the water, then settle to the bottom and stay in the same place to grow and mature. They have no head, eyes, legs or heart.



## Jellies and Anemones



Jellies (often called jellyfish, but they are not fish!) and anemones belong to the same phylum, “Cnidaria,” also known as “Coelenterata. In some species, the life cycle of the animal actually includes an alternation of generations: the jellyfishes reproduce sexually, producing larvae that settle to the sea floor and become anemone-like animals. These in turn reproduce, asexually, to produce jellyfishes.

Drifting and weakly swimming through the water, the soft-bodied jellyfish is shaped like an umbrella or bell. Its mouth is in the center of its undersurface, and its tentacles dangle like a fringe from the edge of the bell. In its tentacles are cells called “nematocysts” that rapidly emit tiny poisonous and sticky threads after contact by prey organisms. The animal is stunned, and the tentacles then entwine and convey it to the jellyfish’s mouth. The nematocysts of some species, such as the large lion’s mane jellyfish, can sting painfully; children should be cautioned not to touch any jellyfish they find either stranded on shore or drifting in the water.

An anemone is somewhat like a jelly turned upside down. The main part of the animal is an upright column. At the top of the column are its tentacles, and in the center of the ring of tentacles is the animal’s mouth. Like jellies, most anemones have nematocysts in their tentacles that they use to stun and capture prey. Students may touch the anemone’s tentacles with their fingers without fear of being hurt. Do not touch the sensitive skin of the face, arms, legs, body or tongue to the anemone, however.

Anemones, like jellies, have no bones and need water both inside and out for support. Out of water, they look like masses of gelatin. If children find such a specimen ashore, urge them to look into the water nearby. There they are likely to spot an anemone upright, expanded and beautiful. Most anemones attach themselves to hard surfaces and move so slowly along the sea floor that their movement goes unnoticed. Some, however, look, live and behave in unusual ways:

1. Some subtidal anemones construct and live in tubes that extend downward into the substrate. These creatures protrude from their tubes to feed, but may withdraw into them if threatened.

2. Some other, uncommon types of anemones are relatively mobile and can flop slowly over and over as if doing cartwheels.

3. Responding to the presence of predatory sea stars, members of at least two species actually let go of the bottom and swim feebly, with writhing motions.



Anemones reproduce in several ways. Like almost all animals, they can reproduce sexually. Eggs and sperm are released through the anemones' mouths. Fertilized eggs grow into tiny larvae that drift for a time, and then settle to the sea floor to grow into adults. In one species, the fertilized eggs develop within the female and move out through the mouth to attach as small individuals at the anemone's base; when they are large enough they move away to the surrounding rocky area. An anemone may also reproduce by splitting in two, dividing itself top to bottom through the center of its column and oral disc.

Several species of anemones may be found intertidally in Alaska. These are three of the most conspicuous:

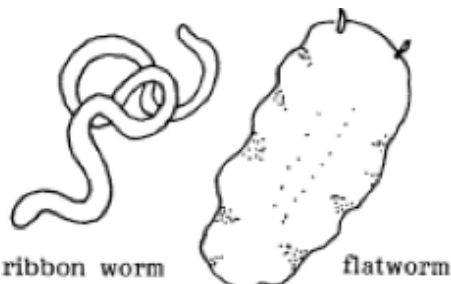
1. *Anthopleura artemesia*, sometimes called the "burrowing anemone," is small, about two inches in diameter, and is found in a range of colors, including pink, copper and green, always with bands of lighter and darker shades of the main color along the tentacles. The green color of *Anthopleura* is caused by symbiotic (mutualistic) algae. *Anthopleura* can often be observed in tidepools with its tentacles fully extended. This anemone may anchor itself to a rock covered with sand or mud; when the tide is low, it appears as a small, raised, sandy ring that retracts when touched.

2. *Tealia crassicornis* is sometimes called the "Christmas tree anemone." It has a pattern of irregular streaking of red, green and tan. A large anemone, it is often left exposed at low tide on Alaska shores.

3. *Metridium senile* is usually white and differs from the other two species in that its tentacles are finer and appear almost feather-like. Sometimes called the "fringed" or "plumose" anemone, this species is often spectacularly abundant on pilings and under docks. It feeds mostly on zooplankton--the characteristically tiny animals that float in great numbers in the ocean.

## Worms

Worms of many kinds are an inconspicuous but important part of any beach. Many



species have adapted to their habitats in specialized ways. There are species of worms living naked in sand or mud substrates, some that live commensally with larger animals, and others that reside in parchment like or calcareous tubes.

Worms serve a vital function in their environment by loosening the substrate and processing nutritive

material into the food chain. They are themselves on the menu of birds, fishes, and other animals. Although the term “worm” as it is commonly used refers to slender, wiggly animals with no legs, there are actually a vast number of worm species--some slender, some fat, some with appendages and some without. Five main groups, or phyla, of worms may be found on Alaskan beaches:

1. Platyhelminthes (flatworms)

These may be as long as four inches, but most measure only a fraction of an inch. They are flat and seem to flow over a surface, often looking like a moving spot on a rock or shell. They may be found on moist surfaces and are interesting to watch through a magnifying glass.

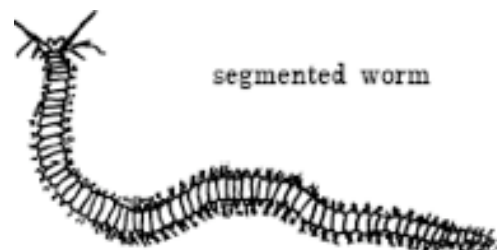
2. Nemertea (ribbon or proboscis worms) Ribbon worms are round, sometimes highly colored, and quite elastic. A specimen that is a foot long when contracted may be capable of stretching to 10 feet. Ribbon worms break apart easily, and each severed part is capable of producing a new individual. They feed by everting a mouth apparatus called the “proboscis”.

Some ribbon worms burrow into the sand or mud, while others live among clusters of barnacles, mussel shells or other marine organisms.

3. Echiura (spoon worms) These take their common name from the shape of the proboscis, which when contracted looks like a spoon. They live in burrows and may be found under intertidal rocks in muddy areas with their proboscis projecting from the burrow. They are two to three inches long.

4. Sipuncula (peanut worm) Taking their common name from their bulbous shape, peanut worms are burrowers in sand or mud and are often found in low intertidal areas. They may be several inches long.

5. Annelida (segmented worms) The annelids are a large group of worms (including the common earthworm) with segmented bodies. The motile surface dwellers have well-developed heads with sensory organs including eyes, taste buds and tentacles. Others have reduced sensory structures on the head and may have tentacles or other structures used for feeding on the organic material associated with sediment. Many annelids have appendages called parapodia that are used for crawling, digging or swimming.



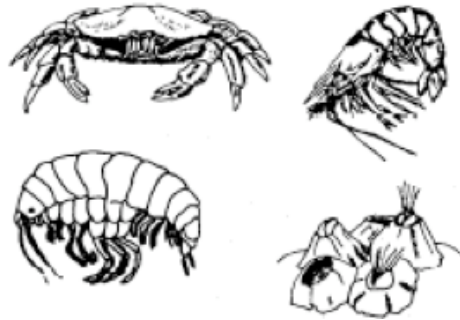
Annelids are greatly varied in size and appearance. The backs of some are covered with scales (scale worms); some live in calcareous or parchment-like tubes (tube worms); and others live in cones made of cemented sand grains (cone worms). Annelids can be found in virtually every type of marine habitat (as well as in fresh water and on land). Some form part of the zooplankton) some burrow in mud, others live under rocks or shells, and



there are even some living in sediments of the deep sea.

### **The Crustaceans: Crabs, Shrimps, Barnacles and Amphipods**

Crabs, shrimps, barnacles and amphipods belong to the class Crustacea, a large group related to the class Insecta, the insects, within the phylum Arthropoda. Like ants and beetles, crustaceans have a hard external skeleton and jointed legs. Numerous kinds of crabs may be found in Alaska. Small shore crabs are sometimes abundant in tidepools or other moist, protected places. Small, spiny juvenile king crabs can sometimes be found stranded by a receding tide. Hermit crabs--unique animals that protect their soft abdomens by living in empty snail shells—may be numerous on rocky shores, typically in tidepools.

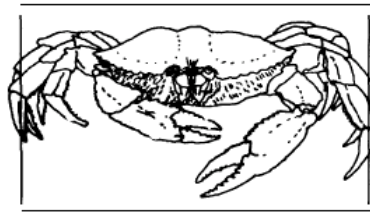


Crabs are non-swimming, bottom-dwelling animals usually protected by a hard outer covering, or “exoskeleton”. Although each of the many Alaskan crab species has its own distinguishing features, all crabs share certain characteristics:

**Growth:** When we grow, our bones lengthen and get larger, and the soft muscle and other tissue making up our bodies also grows. Crabs grow in a different way. Instead of an internal skeleton, they have a hard outer shell that cannot expand. In order for a crab to grow, that shell must be shed, or “molted.” In this molting process, a new, larger soft shell forms between the animal’s muscles and the older hard-shell covering. This is visible as a red or brown covering over crab meat. When the old shell has been shed, the crab puffs itself up by taking in a lot of water to expand the new shell, which then hardens to both protect the soft animal inside and provide some “growing room.”

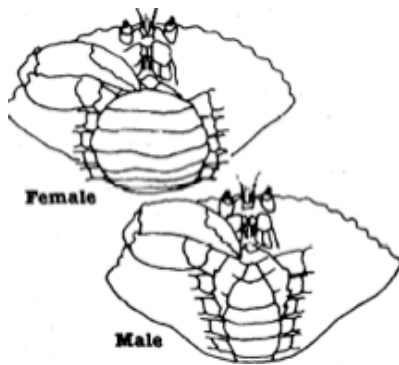
On the beach, students may find empty crab shells. If a shell is whole, it will have a narrow opening on its rear edge--the exit used by the crab when it backed out of its outgrown shell.

**Movement:** A crab’s legs are jointed on different planes to allow complex maneuvering that probably helps it to escape a predator or capture prey. It can move sideways just as easily as it moves forward or backward.



**Feeding:** Most crabs feed on whatever they can find, including annelid worms, clams, snails, and sea stars, alive or freshly dead. (Crab fishermen report that crabs won’t eat rotten bait.) Crabs are equipped with large claws specially adapted for digging in the sediment, tearing and pulling apart food, as well as for catching it. The claws also carry food to the crab’s complex mouth with many parts.

**Reproduction:** Among crabs, the sexes are separate. The male crab typically attends the female as her molting time approaches, and mating usually occurs after molting. (Among



tanner and other spider crabs, the females no longer molt after reaching maturity, but do continue mating.) The female then extrudes the eggs, which she carries attached to her abdomen until they hatch. The tiny swimming larvae are part of the ocean's plankton until they molt several times, change form, and settle to the sea floor to become adults.

The female crab's abdominal flap is broader and larger than that of the male, because it covers and protects the eggs she carries for much of the year.

**Shrimps** are not common intertidally in Alaska, but children occasionally may find some in tidepools; these are usually small and not likely to be of a commercially important species. Unlike crabs, which are compressed top to bottom, shrimps are flattened side to side. Five species of shrimps are fished commercially in Alaska: pink, humpy, sidestripe, coonstripe and spot shrimp. Of these, the spot shrimp are the largest, sometimes weighing as much as a quarter-pound.

Shrimps are crustaceans, capable of swimming and walking. Their ten forward legs are used for traversing the ocean floor, and their abdominal appendages (called swimmerets) are used for swimming. Some species generally stay on the bottom during the day and swim upward in the water column to feed at night.



Like other crustaceans, shrimps must molt to grow. Like her crab cousins, the female shrimp carries her eggs among her abdominal appendages until they hatch. Some species of shrimps in Alaska have a curious life cycle in which all members of the species begin life as males, but are transformed after several years into females, remaining as such for the rest of their lives.

**Barnacles**, very common on Alaska's shores, are encased in a hard, calcareous covering made of several overlapping plates. They use modified appendages to sweep the water. Acorn barnacles collect food particles, and gooseneck barnacles prey on tiny animals.

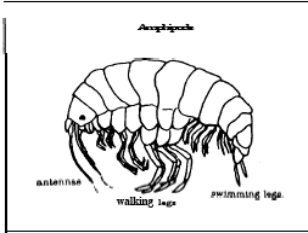
The young barnacle is free-swimming like other crustacean larvae. When it settles to the ocean floor, however, the barnacle attaches itself by its head to the substrate and starts to secrete a hard, calcareous sheath around itself. When the protective cover is complete, it usually is conical or columnar, and is topped by plates that open like a double-sliding door. Through the opening, the barnacle inside sticks out specially modified legs that wave rhythmically through the water to collect bits of food.



Different varieties of shore-dwelling barnacles live in different beach zones, and several

species thrive on rocky Alaskan beaches. Drifting, open-water gooseneck barnacles may be washed ashore on outer coasts.

**Amphipods**, also called beach or sand hoppers, are small, active, laterally compressed animals almost completely covered by an external skeleton. They have strong back muscles that they can flex in order to leap or hop. These animals are usually scavengers; they can be found under rocks and in nooks and crannies formed by the growth of other organisms. Amphipods are the street cleaners and garbage collectors of the marine environment. When food such as crab pot bait or a dead fish on the ocean floor is available, they may congregate in great numbers. In spite of their small size, they can quickly strip a food source to the bones.



## The Hermit Crab

**Hermit crabs** are members of the same group of crabs as king crabs.

Both have only three pairs of walking legs and one pair of chelipeds (pincers). True crabs, such as Dungeness and tanner crabs, have four pairs of walking legs plus a pair of chelipeds. Hermits, however, are a distinctive group of animals whose abdomens have been modified to take advantage of the protection afforded by abandoned snail shells and similar objects.



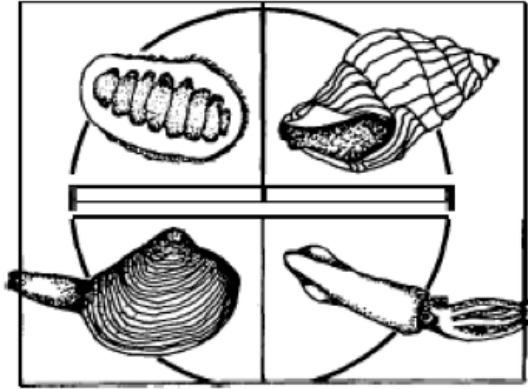
The front of the hermit crab looks like that of other crabs, with antennae, stalked eyes, jointed legs and a body covered by an exoskeleton; but the animal's soft abdomen is long and usually curved. There are special hooks on the small appendages on the end of the abdomen. These are used to grasp the internal column of a snail shell.

Like other crustaceans, hermit crabs molt. When they grow, they often must move to larger snail shells. When the crab locates a new shell it likes, it releases the old shell and backs into the new one.

On the beach, the hermit crab may be found in tidepools, on sandy stretches or among cobbles. While examining snail shells, children may be startled to find one sheltering a retreating hermit crab, intent on withdrawing as far as possible inside to protect itself.

## The Mollusks- Bivalves, Univalves, Chitons, Octopi and Squid

**Mollusks** are a large and diverse group of soft-bodied animals which usually have a prominent shell and a thick, muscular foot. The shell may be a spiral covering the whole animal; it may consist of one, two, or several parts; it may be internal, or altogether absent.



**Univalves** are mollusks having one part, or valve, to their shells. They belong the class Gastropoda, which is the largest class of mollusks. Snails, limpets, and abalones are examples of univalves.

The mantle, a part of the soft animal which enlarges as the animal grows, secretes the shell. In the case of snails, the shell spirals around a central column; its opening is always at the widest part of the shell and is

the starting place for new growth.

**Univalves** generally have well developed heads and sensory capacities because they must search for their food. Some, such as limpets, are grazers that scrape their food from rocks with a tooth-bearing, striplike structure in the mouth called a radula. Others, however, inject their prey with poison or feed in other specialized ways. The eggs of many univalves may be found in clusters on beaches. Masses of eggs often are laid in different kinds of cases, some of which look like bent corncobs or oat grains, others like collars, tiny doughnuts, or groups of glassy beads. The larvae hatch as tiny swimming animals that will live in the ocean until they mature.



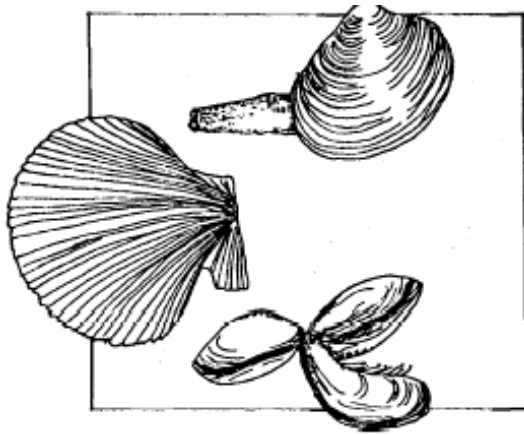
**Sea slugs, or nudibranchs**, are gastropods without shells. These soft animals may be mottled, dotted or striped in browns, yellows, reds, purples or combinations of colors. Often, elaborate branched or finger-like structures on their backs add to

their striking appearance and serve as gills for gas exchange. They range in size from a fraction of an inch to more than a foot in length, but the animals found intertidally are generally small--sometimes small enough to be overlooked.

Sea slugs usually are specialized feeders and often may be found on their prey. Some eat barnacles. Others eat anemones and other cnidarians, and can store their prey's stinging cells in the structures on their backs for protection. One species of sea slug has a rounded hood that it uses to sweep the water for food. Sea slug eggs usually are laid in gelatinous ribbons resembling the extrusions of a cake-decorating tube.



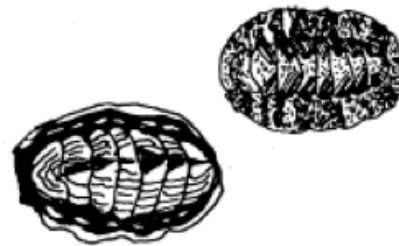
**Bivalves** such as clams, cockles, mussels, oysters, and scallops are mollusks having two parts—or valves—to their shells. The shells are fastened together by a hinge. Muscles control their opening and closing, but the elastic fibers of the hinge ligament pull the



shells apart. The soft animal inside the protective case usually has a much reduced head, but may have a well developed foot for digging. Bivalves may live buried in sand or mud, or embedded in wood or sedimentary rocks (clams); or firmly attached to a hard surface (mussels); or unattached and unburied (scallops). Unlike univalves, which actively seek food, bivalves are filter feeders. They pull water into their bodies (often with an incurrent siphon), strain microscopic food out of the water, and then expel the water through an excurrent siphon. Some bivalves are deposit feeders, and utilize the

organic material associated with sediment. Among bivalves, sexes usually are separate. Eggs and sperm usually are released into the open water. Bivalves never produce egg cases as univalves do.

**Chitons** are mollusks with eight overlapping valves to their shells. They are flat animals, usually found clinging tightly to rocks. Their ability to conform to a surface and fasten tightly makes them well-suited for intertidal areas where there is often strong wave action. Like limpets, they feed by scraping food from rocks.



Many kinds of chitons live in Alaskan waters, and they can be distinguished by the color patterns on their valves and on the girdle surrounding the valves. They range in size from species that never grow longer than an inch to a large red chiton that may be more than eight inches long.

Sexes are separate among the chitons. Eggs may be laid individually, in cases, in gelatinous masses, or may be carried by the female.

**Cephalopods**, which include octopi and squid, are probably the most intelligent invertebrates. They have well-developed heads, relatively large brains, and are quick and active. Their eyes are similar to our own.

Octopi, with their suction ability, their eight disciplined arms, and their sometimes awesome size of 100 pounds or more, have an undeservedly dangerous reputation. For the most part they are



reclusive, hiding in dens that they leave only to forage for food such as clams and crabs. Although the octopus is capable of gliding silently and sinuously over the sea floor, it may jet away by using its siphon to expel water. If threatened, octopi and squid may expel ink to confuse predators. It was formerly believed that the ink formed a cephalopod-like shape that the predator would mistakenly chase, but more recent research indicates that the ink cloud may inhibit the predator's ability to locate the fleeing cephalopod by scent. As is true of most cephalopods, one arm of the male octopus is modified for transferring sperm to the female (check for missing suction discs on one arm of the male octopus).

Females usually lay their eggs in protected places and tend them constantly as they develop. Females, who don't take time to eat while they are cleaning and aerating the eggs, usually die after the eggs hatch.

Squid vary in size, from the giant squid to the tiny, bottom-dwelling squid found in Alaska, which is never more than a few inches long. Squid have 10 arms, two more than octopi, and they often have a flap-like projection on either side of the body covering or mantle. While octopi have no shell, squid have a thin, flexible, transparent or translucent internal remnant of a shell. Unlike octopus eggs, which are usually tended by the female, squid eggs are left to develop on their own and have a chemical characteristic that discourages other sea animals from eating them.

### **The Echinoderms – Sea Stars, Sea Urchins, Brittle Stars, Sand Dollars, and Sea Cucumbers**

Although it is not always obvious, the skeletons of the spiny echinoderms consist of tiny plates. Sometimes the plates form a recognizable shell, such as in the case of sea urchins; sometimes they are widely separated, as with sea cucumbers. Spines form part of the brittle armor of some animals, including sea stars, sea urchins, sand dollars and brittle stars.

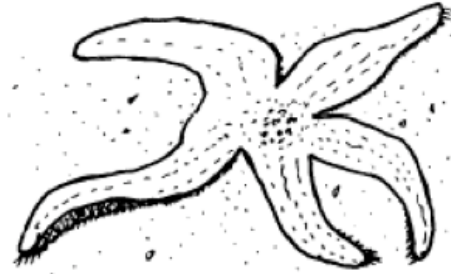
Radial symmetry is a distinguishing characteristic of this phylum. Like a pie, each echinoderm can be divided into similar wedges. Only among sea cucumbers is this difficult to see. To visualize a sea cucumber "pie," we must think of setting it on end before slicing.

In addition to their spiny appearance, skeletal plates and radial symmetry, all echinoderms have a water-vascular system that includes tube feet. These tiny, usually suction-cupped tube feet are linked to a system of canals that in most cases are in turn connected to a sieve plate through which water flows in and out of the system. By muscular contractions and relaxation, each animal can attach or release the tube feet it uses for locomotion.

Most echinoderms release eggs and sperm into the open waters; the larvae swim freely until they mature and settle to the sea floor. Some sea stars brood their eggs under their arms, and small sea stars emerge from the fully developed eggs.

Sea stars and sea urchins often are abundant on Alaska shores. Sometimes sea cucumbers are plentiful too. Brittle stars are less often seen but may be found under clusters of other invertebrates. Sand dollars usually are subtidal, but sometimes their “shells” are washed ashore.

**Sea Stars** may be soft or stiff; many have five rays but several species have more. One species found in Alaska, the sunflower star (*Pycnopodia helianthoides*), develops new arms as it matures until it has 20 or more.



Each of the many species found in Alaskan waters has distinct external characteristics separating it from other species. In general, however, major features of sea stars remain the same. All have an upper, or aboral, and lower, or oral, side. On the upper side there may be spines, tiny pincers, and microscopic, finger-like structures, used for gas exchange. In the center area of the upper side is the sieve plate or madreporite through which water enters the vascular system. A groove runs the length of each ray on the underside of the sea star. There are dozens of tube feet in each groove; the animal's mouth is located where the grooves converge. Examination with a magnifying glass may reveal at the tip of each ray a tiny eye spot; a light receptor that can give the star limited information about its environment.

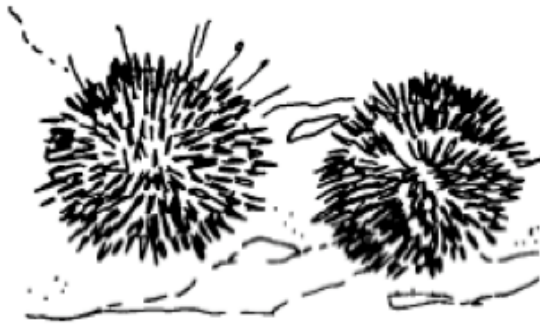
**Brittle Stars** are like sea stars in many ways. Both are radially symmetrical and have rays, a central mouth on the underside, and a system of tube feet. Brittle stars, however, have more snakelike rays than sea stars and move more sinuously.



Brittle stars are so named because they readily shed pieces of their rays and even shed the central disc cap. Often these animals are found missing the terminal parts of one or more rays or with distinct areas of color change on rays, which mark the place where a ray has been regrown.

Many brittle star species are nocturnal, hiding under rocks, among kelp holdfasts, or in clusters of other invertebrates by day, and emerging to feed at night. Brittle stars are not often encountered intertidally but may be found tucked in some nook or cranny. Some brittle stars have pouches for carrying eggs at the bases of the rays. Others release their eggs and sperm into the water. A number of species of brittle stars are found in Alaskan waters. One unique species, the basket star, *Gorgonocephalus caryi*, has dividing rays that form many tendrils to make it look like the mythical Gorgon's head with its writhing snakes for hair. The flesh-colored basket star lives subtidally and feeds by anchoring itself, then extending tendrils into the current to strain tiny drifting organisms or other food from the passing waters. Although they are not intertidal animals, basket stars are occasionally washed ashore.

Several species of **sea urchins** live in Alaska's intertidal or shallow waters. Among them, the green urchin, *Strongylocentrotus droebachiensis*, is the most common. Red urchins, *S. franciscanus*, and purple urchins, *S. purpuratus*, may be found on rocky shores exposed to the open ocean.



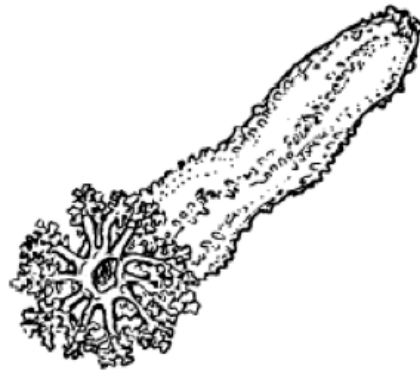
Sea urchins look like living pin cushions. Externally they are covered with projecting spines, and among the spines are pincers and tube feet.

Like the other echinoderms, sea urchins are radially symmetrical and have a water-vascular system that includes tube feet, connecting canals and a sieve plate.

To fully understand them, one must study both a living animal and the shell or "test" of an urchin. The test is a globular structure with a series of large and small knobs on which the spines articulate, and a series of pores through which the tube feet extend. The mouth of the urchin is a complex structure called "Aristotle's lantern." The sieve plate and the openings through which eggs or sperm are released into the open sea are on top of the urchin's test.

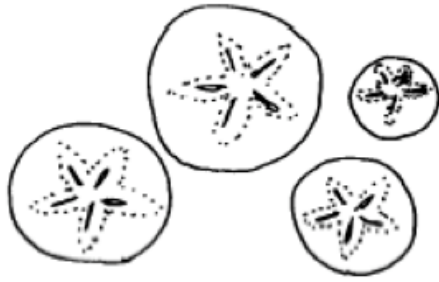
**Sea Cucumbers**, like other echinoderms, are radially symmetrical and have tube feet. Instead of being provided like urchins and sea stars with firm skeletal support, however, the cucumber has greatly reduced plates in the form of tiny "buttons" embedded in its skin. These give the animal its soft, "squishy" quality.

A number of species of sea cucumbers may be found on Alaskan shores. They range in size from the black, tar-spot cucumber (*Cucumaria vegae*) less than an inch long, to the large, edible California sea cucumber (*Parastichopus californicus*) that may be more than 12 inches in length. Some of the sea cucumbers live in crevices; some live under rocks, and some wander over the ocean floor, but most use a mop-like circle of oral tentacles to gather food. Typically, the tentacles extend to feed and are drawn one by one inside the animal and "licked clean" of food particles.



As a protective act when molested, some cucumbers have the peculiar habit of throwing their internal organs out through the anal opening, or through a rupture in their body wall. Then, within 6-8 weeks, they re-grow them.

The **sand dollar** is closely related taxonomically and by habits to the sea urchin. Like urchins, sand dollars have rounded, calcareous skeletons called "tests." Tube feet are found on both surfaces of the test, and form a star-shaped pattern on the upper surface.

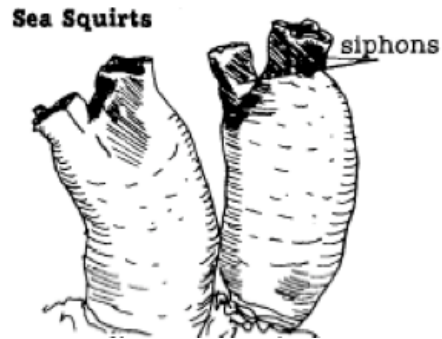


Additional tube feet are found on both the upper and lower surfaces. Sand dollars are covered with soft spines, but these are absent from most specimens found on the beach- rubbed off by the surf.

Live sand dollars are usually found partially buried in the sand, where they search for their microscopic food. They use heavy particles (such as bits of gold) to help weigh themselves down, so many people have suggested mining them! If students find live sand dollars, tell them to replace them right side up, as some species can't turn themselves over without the help of the tides.

## The Chordates

**Sea squirts** are primitive chordates. This means they have a notochord, a rod-like structure in the back, as the chief internal skeletal support at some stage of their development. Most chordates are vertebrates. In vertebrates, such as snakes, birds, and humans, a backbone of bone or cartilage segments develops around the notochord during the embryo's development; the notochord itself then generally disappears (it persists in some fishes). Sea squirts only have a notochord in their early, larval stage. In adults, all traces of a spine have disappeared; that is why they are discussed here with the true invertebrates—animals with backbones.



The sea squirts may be translucent or opaque. Tan and orange are common in Alaskan sea squirts, but many other colors are found. Some sea squirts live as solitary animals that may be several inches tall, but others form flat or rounded colonies comprising numerous individuals. Their gelatinous texture helps to distinguish them from sponges.



colonial sea squirt

Each sea squirt has two openings or siphons. Water comes in one siphon and goes out the other. The animal strains out tiny bits of food as the water flows through it. The ability to shoot water out through the siphon gives this animal its common name.

Both solitary and colonial sea squirts often are hosts to various animals such as sponges, mussels, amphipods and small tube worms.