

KEYWORDS AND PHRASES WITH DEFINITIONS FOR LESSONS 9,10,AND 11

A few terms from previous lessons are included here for the convenience of the instructor

Adult clam – a clam that has reached maturity

Anus – the opening through which waste matter is expelled; in the clam, the waste travels from the anus into the excurrent siphon

Anterior adductor muscle of clam – the muscle located towards the front of the shell that contracts to pull the shell toward the midline of the body; in the clam, the muscle works to close the shell

Anterior adductor muscle scar – the small round-shaped scar located on the anterior or front end of the clamshell.

Anterior end of clam – the front end of the clam

Bivalve - a mollusk, having a shell consisting of two hinged parts. Example: A clam

Byssus - a tuft of fine silky strong filament that comes from a gland in mollusks that is used to attach them to a surface

Clam larva - an early stage in the life cycle of the clam

Chondrophore- a spoon like, tooth like structure on the left hinge of the clam's shell

Crystalline style of clam – a rod-shaped structure that is turned by cilia in a sac connected to the stomach; the turning motion helps to bring food into the stomach and sort it for digestion

Cultured clam – clams grown in a controlled environment such as a hatchery or farm

Digestive gland of clam – an organ or structure that secretes an enzyme that helps break down the food

Digestive system-the organs that work to break down food into a form the organism can use

Dorsal – referring to the top (the dorsal side or top side)

Egg – a female reproductive cell

Esophagus-the tube through which food passes from the mouth to the stomach

Excretory pore – a small opening in the excretory system of the clam

Excurrent siphon – the exhalant siphon through which waste material exits the clam's body; smaller than the incurrent siphon and located on the hinge side of the clam

External Anatomy – the outside structure of an organism

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Fecundity - the quality or power of producing abundantly

Fertilization – to initiate reproduction of a species; the fusion of gametes (sperm and egg) to produce a new organism

Foot - also called pedal of clam; a hatchet shaped muscular structure used for movement

Gill (of clam) – an organ that exchanges gases for respiration; an organs that traps and transports food toward the mouth using mucus and cilia; two pairs of gills in the mantle cavity area of a clam

Growth rings - the thickened ridges on the shells of a clam which indicate yearly growth

Gonad of clam – reproductive organ of the clam

Heart – a hollow muscular organ that pumps blood to the body of the clam

Hinge line adductor scar – the mark or scar inside the shell that shows where the hinge ligament connected the two shells of the bivalve together

Hinge ligament – tissue that joins the two shells of the bivalve (clam) together

Incurrent siphon – the inhalant siphon; the siphon through which water containing its food (plankton) enters the clam; larger than the excurrent siphon

Infauna - animals that live in the soft sea bottom

Internal Anatomy – the internal structure of an organism

Intestine - the tube like portion of the digestive system that extends from the stomach to the rectum

Invertebrate - having no backbone or spinal column

Juvenile – for our project, a clam (or other organism) that has not yet reached its adult size or sexual maturity; usually a juvenile clam measures $\frac{1}{2}$ " - $1\frac{1}{4}$ ".

Labial palp of clam – small flap that sorts and directs food to the mouth of the clam

Left valve (of clam shell) – The side of the clam which has the umbo

Life cycle – the repeating stages of life that an animal goes through from sperm and egg to mature adult

Mantle of clam – a thin, whitish membrane/lining that encloses the internal organs of the clam; a function of the mantle is new shell growth when the mantle secretes the limy shell

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Mollusk - marine invertebrates having a soft un-segmented body and a shell covering, including clams, oysters, and snails

Mouth of clam –the opening through which food enters the digestive system of the clam

Mya arenaria - the binomial (two term) name of the soft-shell clam, a bivalve; an edible clam with a thin oval-shaped shell found in the coastal regions of the U.S. and Europe

Muscle scar – an area on the inner side of the valve (shell) that shows a distinctive shape

Nephridia (excretory gland) - a long, glandular tube and bladder that helps to remove wastes from the clam

Organism – any living system (plant, animal, fungus, or micro)

Pallial line – the line on the inner shell of the clam that shows where the mantle was attached

Pediveliger stage – a late larval stage in which most of the muscular characteristics of the adult exist

Periostracum - a substance that forms the colored layer of the bivalve shell

Posterior adductor muscle - the muscle located towards the rear end of the shell that contracts to pull the shell toward the midline of the body; in the clam, the muscle works to close the shell

Posterior adductor muscle scar – the small round-shaped scar located on the inside posterior or rear end of the clam shell

Posterior end – the rear or back end of the clam

Rectum – the final portion of the intestine

Shell (of clam) – the external skeleton of the clam which is formed by the secretions from the mantle of the clam in growth ridges or rings

Siphon - a tube shaped organ through which water is taken in and expelled; found in clams and other bivalves

Spat - a young clam measuring less than ½ “

Sperm – a male reproductive cell

Stomach of clam – a saclike digestive organ

Stress ring – a thinner shell ridge on the shell of the clam

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Style sac – a small sac which holds the crystalline style used in the digestion process of a clam

Trochophore – a type of free-swimming larvae with several bands of cilia; early stage in life cycle of clam

Umbo - in biology, a small knoblike bulge on the surface of a bivalve shell near the hinge, which was formed when the clam was a juvenile

Veliger – the stage in development that follows the trochophore larva stage;

Ventral – referring to the bottom side (the ventral side)

Visceral mass of clam - visceral cavity contains the internal organs of the clam

Voracious – consuming great amounts of food