Самостійна робота

Read and translate into Ukrainian the following texts:

UNUSUAL PARTNERSHIPS

There are many types of relationships in the animal world. A very familiar example is when one animal hunts and eats another. This is the predator-prey relationship. Yet nature is not always so cut and dried. On the seashore, as in other habitats, different kinds of animals are regularly seen together. This does not happen by chance - there is a reason. Scientists have different names for these relationships. In the relationship that is called parasitism, one partner, the parasite, benefits, but the other, the host, loses. Some shore crabs are host to *Sacculina*, a strange creature related to the barnacles. *Sacculina* attaches itself to a young crab and then grows "tentacles" that eat into the crab's body. This parasite gets food while disabling the crab. Another type of relationship, in which both partners benefit, is called symbiosis. The hermit crab and the calliactis anemone live in this way. The calliactis is sometimes called the parasitic anemone, but it does not harm its hermit host. It feeds on particles of food that the crab drops, and the crab is protected by the stinging tentacles.

Hermits at home. Hermit crabs do not have shells of their own, so they hide their soft bodies in the shells of dead animals. Sometimes an anemone is attached to the shell. As the crab grows and moves to a larger shell, it often takes the anemone along with it. There are also land hermit crabs in the tropics. Some species live in hollow mangrove roots or bamboo stems.

Three-in-one. Each of the three animals in this "partnership" comes from a different major animal group. The hermit crab is a crustacean. The anemone is a coelenterate (cnidarian). The shell once belonged to a whelk, which is a sea snail and member of the mollusk group.

Sting in the pincer. The boxer crab carries small anemones in its pincers. They act as "stinging clubs" and are waved at any creature posing a threat.

Claw in the door. In its defensive position, the hermit crab pulls itself deep inside the shell. The right front claw (cheliped), which bears the large pincer, is usually bigger than the left one, and the crab holds it across the shell's entrance to make an effective door. (In this example the pincer is missing; it may have been bitten off by a predator or squashed by a boulder.)

Sweeping the floor. The tentacles of anemones reach upward for floating or swimming victims. However, a calliactis anemone on a hermit crabs shell tends to hang down and sweep the rocks for bits of food "spilled" by the hermit crab.

Out of its shell. The hermit crab's soft, curled abdomen is clearly visible when the animal comes out of its shell. When it grows too big for the shell, it looks for another, larger shell. The two back pairs of legs are small and adapted for hanging on to the inside of the shell.

On the move. When the hermit crab is moving around, its head, antennae (feelers), front claws, and first two pairs of legs are exposed. Like its crab cousins, the hermit crab is a scavenger and feeds on plants and bits of dead and dying animals – in fact on almost anything edible. A dying animal on the shore is soon surrounded by many crabs picking and pulling at its flesh.

Safe among the stings. Clown fish (these are tomato clowns) live among the stinging tentacles of anemones. The fish develop special defenses on their bodies to prevent them from being stung. It is believed that both partners benefit from this arrangement in various ways. The clown fish are safe from predators in the protective tentacles and may eat "leftovers" from the anemone. The anemone may, in turn, be cleaned in the process and eat food dropped by the clown fish. It is also possible that the brightly colored clown fish attract predators, which the anemone then seizes.

Home in a cone. Not all hermit crabs live in whelk shells. This Pacific flat hermit crab is occupying an empty omaria cone shell. Cone shells are tropical mollusks; some species are extremely venomous.

OCEANS IN MOTION

Oceans cover three-fourths of Earth's surface. The amount of water on Earth today is the same as it was 4.5 billion years ago. The water has been recycled from water beneath Earth's crust, to the surface, to the atmosphere, and back billions of times. Water changes state by losing or gaining energy. When more water molecules are escaping than are being captured, evaporation is occurring. When more molecules are being captured than are escaping, condensation is taking place. Ocean water is salty because of the salts dissolved in the water. The salinity of seawater is much greater than that of freshwater sources that empty into it. On average, 34.7 grams of dissolved solids are in each 1000 drams of ocean water. The density of water increases with an increase of salinity. The density of ocean


water increases with a decrease of temperature and/or an increase of pressure.
Solar energy and forces within Earth and Earth's rotation are the basis for the circulation of ocean waters and water cycle. The deflection of particles in motion along Earth's surface to the right in the Northern Hemisphere and to the left in the Southern Hemisphere is known as the Coriolis effect.
Earth's rotation also causes patterns in the global climate because of the difference in temperature of air passing over water as opposed to the temperature of air passing over land.
The marine food chain consists of a sequence of organisms that transfer energy from primary producers to primary consumers, to secondary consumers, to tertiary consumers. These kinds of organisms are generally described by their depth in the water and their distance from the shore.
Besides food resources found in oceans, many other resources are found there. The ocean floor contains significant amounts of oil and natural gas.

ACID RAIN

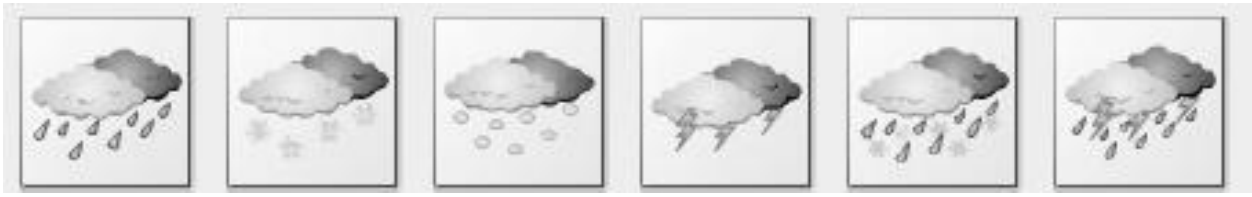
Acid rain occurs after the burning of fossil fuels releases sulphur and nitrogenous compounds into the atmosphere. There, sunlight converts these compounds to nitrogen and sulphur oxides, and they combine with water to become acid rain (mostly nitric acid and sulphuric acid). Acid rain changes the pH of lakes and streams and kills many organisms in them. It also injures plants upon which it falls. About half of the Black Forest in Germany has succumbed to its effects. Acid rain also affects nonliving materials. For example, the natural weathering of ancient Mayan ruins in southern Mexico, the Parthenon in Greece, and monuments in Washington, D.C. has been accelerated by acid rain during the past decades.
Acid rain is not responsible for all dead or dying trees in the world's forests. Some trees have perished as a result of insufficient rainfall during dry years. Other has succumbed to insect infestations or salt scattered to melt ice and snow on roads, and still others have been weakened by disease.

✎ **Write the numbers of the corresponding figures.**

Hot ___ Rain ___ Frost ____ Freeze ____ Dew ____ Snow ____ Warm _____

Cold ___ Hailstone _____ Sunny ____ Thunder ____ Fog _____ Cloudy _____
Overcast ___ Rain and snow ___ Wind ____ Thunder storm ____ Strong wind ___

1 2 3 4 5 6

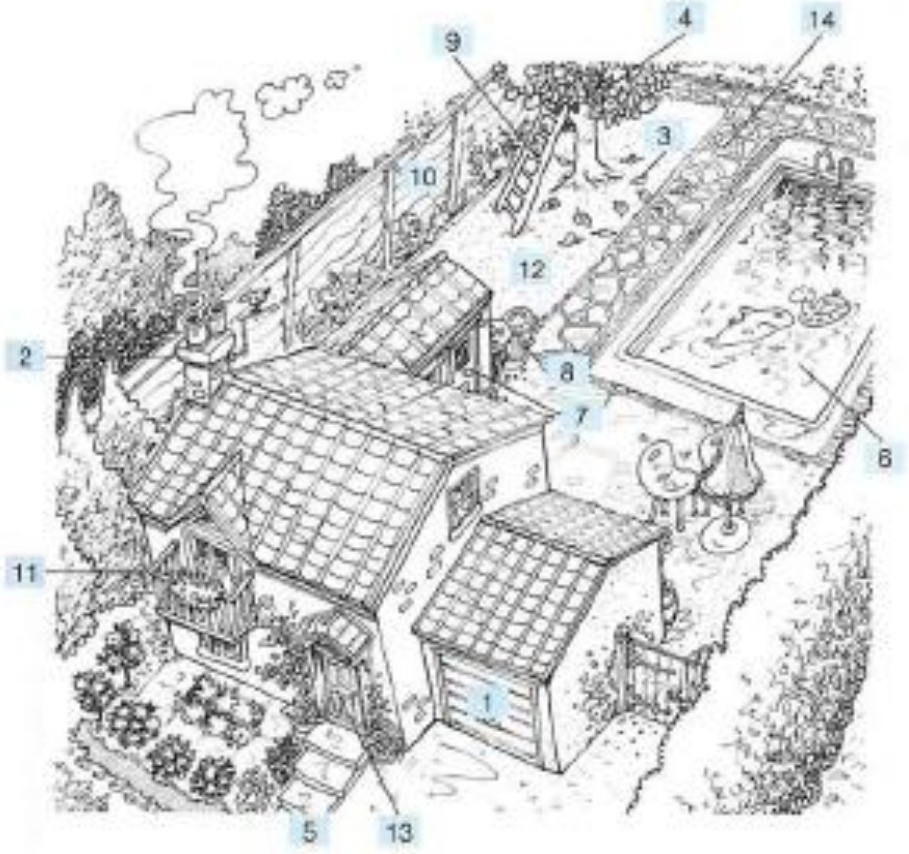


7 8 9 10 11 12

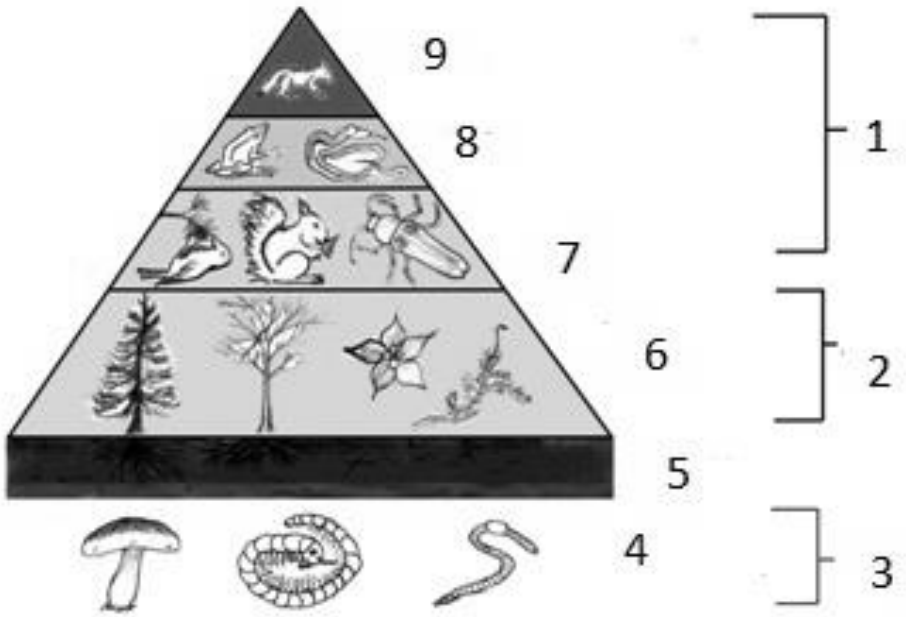
13 14 15 16 17 18

Write the numbers of the corresponding figures.

Apple tree ____ Back door ___ Balcony ____ Bins ____ Chimney ___ Fence ____
Front door ___ Garage ____ Ladder _____ Lawn _____ Leaves ____ Path ___
Pool _____ Steps _____



✎ **Write the suitable words using words given below:** secondary predator, plants, primary predators, soil, herbivores, decay detrivores, heterotrophs (використовується двічі), autotrophs.



1_____ 2 _____ 3 _____ 4 _____
5 _____ 6 _____ 7 _____ 8 _____