

Common Grass Frog Fact Sheet

Common Name: Common Grass Frog, also known as common frog

Scientific Name: *Rana temporaria*

German Name: Grasfrosch

Description: They are typically brown or greyish in color, but some individuals may be yellow or reddish. The flanks are usually yellow, the underside white, and the upper surfaces feature variable blackish markings. The large hind legs feature webbed feet; they power strong jumps and an excellent swimming ability, and are covered with dark bands, which provide camouflage.



By Ernie (Own work) [Public domain], via Wikimedia Commons

The male common frog tends, on average, to be slightly smaller than the female, and can be identified by whitish swellings on the inner digits of the front feet, which support dark pads during the breeding season that allow the male to effectively grasp a female.

Adult length: up to 8 cm

Biology: Common frogs hibernate through the winter, either at the bottom of ponds (breathing through their skin) or on land under refuges such as compost heaps. They have a natural “antifreeze” chemical in their bodies that prevents tissues from being damaged while hibernating in cold weather. Ice crystals form in such places as the body cavity and bladder and under the skin, but a high concentration of glucose in the frog's vital organs prevents freezing. During the rest of the year they hunt on land on damp nights; they feed on snails, slugs, worms, and a range of insects.

In spring, male common frogs arrive at breeding areas before females, and it is thought that individuals return to their natal ponds by following scents. There is typically heavy competition amongst males for females, involving much croaking and wrestling. Males grab a female and remain clasped to her body for days or weeks before spawning takes place. All of the frogs in a pond tend to spawn roughly within a few days of each other. The female releases 1000 to 2000 eggs, the male then releases sperm. The eggs are coated in jelly, and are popularly known as 'frogspawn'. After 10 - 14 days, the tadpoles hatch, becoming free-swimming a few days later, and undergoing metamorphosis into adults 10 - 15 weeks after hatching. Tadpoles are vulnerable to predation by a range of aquatic creatures, including water beetles, newts, and fish.

Habitat: The common frog is found in a wide range of habitats, and breeds in puddles, ditches, ponds, and large lakes, as well as urban and rural garden ponds. It has even been recorded breeding in running water.

Diet: Newly hatched tadpoles are mainly herbivorous, feeding on algae, detritus (dead organic material), plants, and some small invertebrates, but they become fully carnivorous once their back legs develop, feeding on small water animals or even other tadpoles when food is scarce. Juvenile frogs feed on invertebrates both on land and in water but their feeding habits change significantly throughout their lives and older frogs will eat only on land. Adult common frogs will feed on any invertebrate of a suitable size, catching their prey on their long, sticky tongues, although they do not feed at all during the short breeding season. Preferred foods include insects (especially flies), snails, slugs, and worms.

Range: Occurs throughout Germany and in most of Europe, with the exception of Portugal, most of Spain, Italy, and Greece.

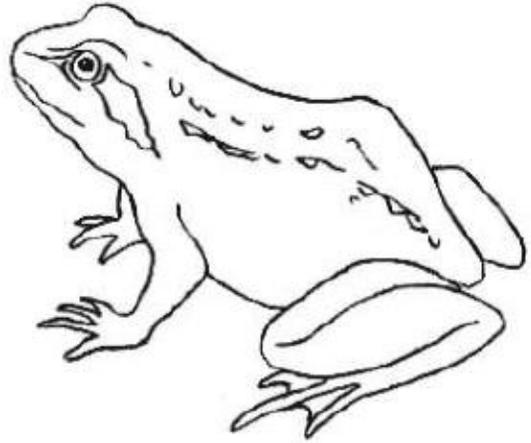
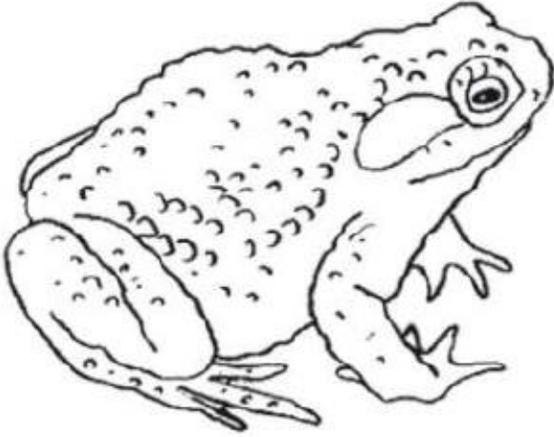
Threats: The common grass frog is not currently threatened, but populations are vulnerable to the destruction and pollution of water bodies. Crossing roads during breeding migration is dangerous for them due to vehicular traffic. Pesticides and agriculture activities can be harmful. Natural threats to adult common frogs include predation by storks, herons, blackbirds, and geese. The spawn (eggs) are eaten by ducks and newts.

Conservation Status: The common frog is classified as Least Concern (LC) on the IUCN Red List. In Germany, it has special protection status that makes it illegal to catch, hurt, or kill them.

Resources: <http://www.arkive.org/common-frog/rana-temporaria/>
https://en.wikipedia.org/wiki/Common_frog

Frog versus Toad

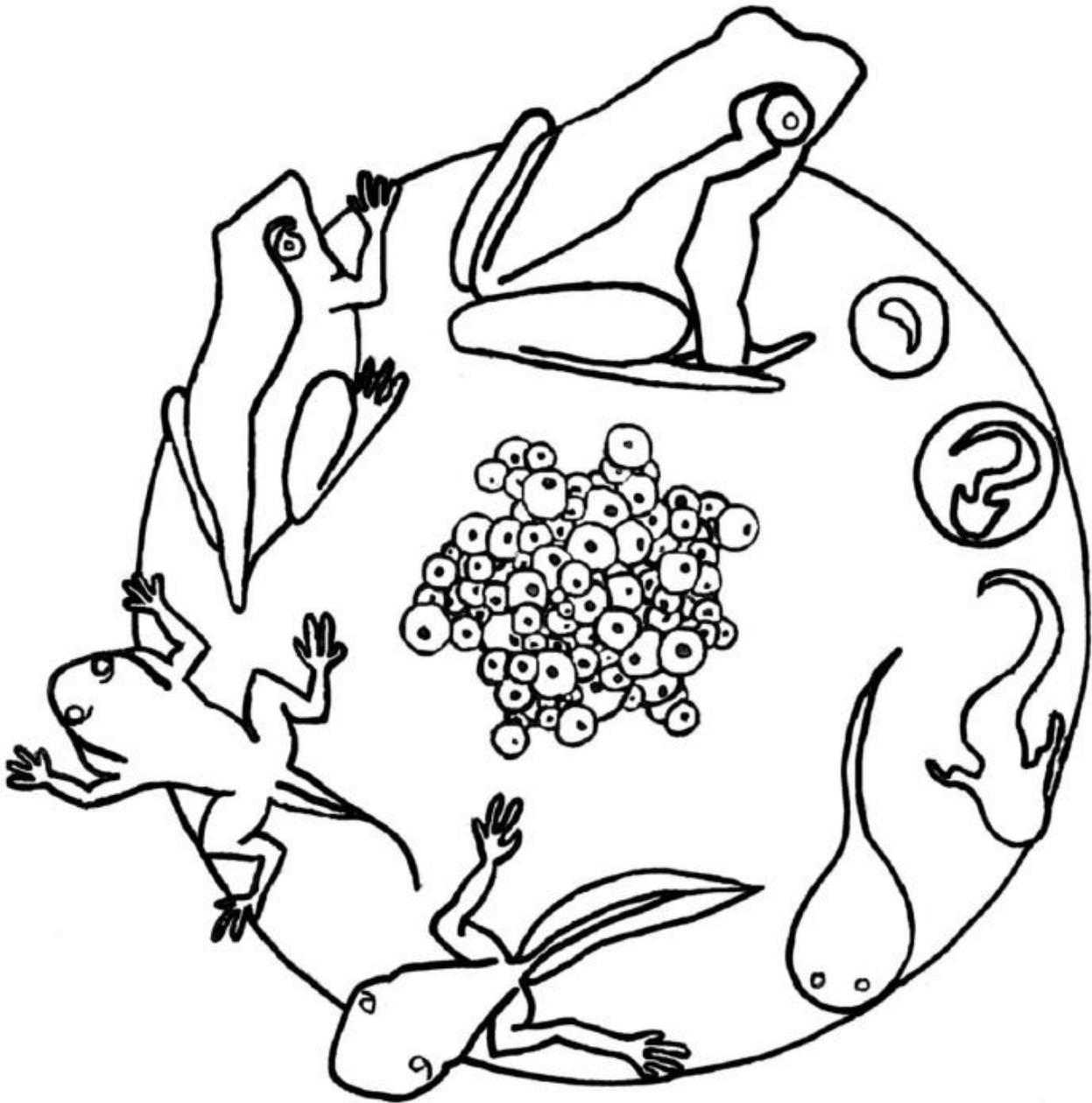
Research the differences between frogs and toads. Circle the differences and list them below.



Differences:

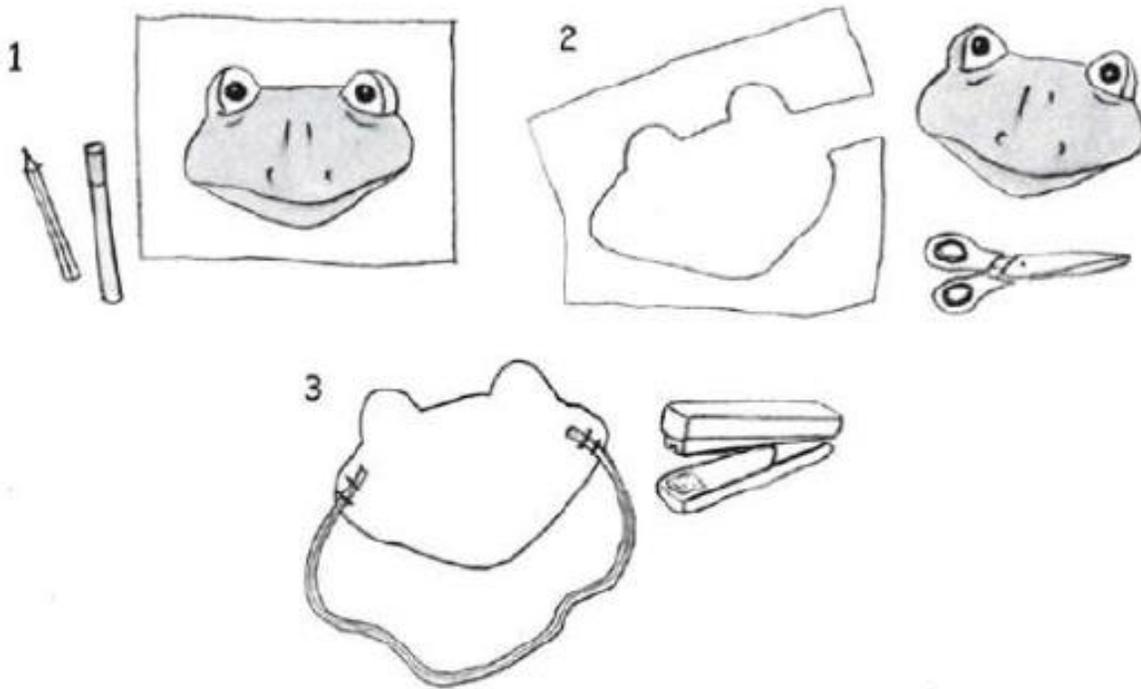
Frog Cycle Mandala

Talk about the life cycle of common grass frogs. Students can color this picture and hang it in the classroom.



Create Your Own Frog Mask

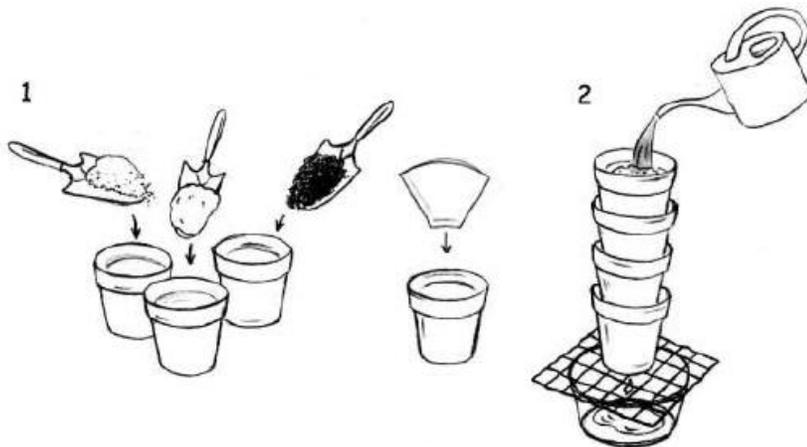
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Clean Water for Frogs

In this activity, you will build a natural water treatment plant. You can begin by discussing water pollutions and its sources and how frogs are impacted by water pollution.

1. Mix a gallon of water with either food coloring or dirt to “pollute it.”
2. Fill pots with different materials.
3. Test each pot separately and then all together. What happens to the water after it filter through each medium? Discuss results. Does the water become clearer with each filtration? Relate this to a wetland and wetland functions.



Materials

- Sand
- Soil
- Clay
- Coffee filter
- Small plastic pots
- Water
- Food coloring or dirt for “polluted” water
- Metal or plastic cookie sheet
- Clear bowl to capture water

