Pepeketua - New Zealand native frogs

This task is about using information about native frogs to think about possible threats to their survival.

Here is some information that scientists have observed about frog lifecycles.

Frog life cycle

In New Zealand we have three species of frogs that have been introduced from other countries. These are the ones we are most likely to see.
These frogs are adapted to live part of their lives in water. They lay large numbers of eggs in water. Tadpoles hatch from the eggs and live totally in water, breathing through gills like a fish. They gradually develop lungs and legs, and then are able to spend time on land.

From the list below, which adaptations are advantages for frogs' survival? *(Choose one or more.)*

- ○ Tadpoles cannot survive out of water.
- ○ Many eggs are produced so the population can cope with more being lost to predators.
- ○ Tadpoles can live in a dry climate providing the water they live in doesn't dry up.
- ○ Tadpoles and eggs are a food source for other things living in the water.

In New Zealand we also have four species of native frogs. One thing that is different about them from most other frogs is their unusual life cycle.

The table below shows some differences between New Zealand's native frogs and most other frogs.

NZ native frogs	**Most other frogs**
Live in cool damp forests	Live near water
Lay eggs in damp places under rocks and logs	Lay eggs in water
Lay a small number of quite large eggs with a big yolk	Lay many small eggs
Develop in the egg until they have reached the froglet stage	Hatch out of the egg as a tadpole
Froglets are looked after by their parents	Parents do not look after eggs or tadpoles
Froglets have lungs to breathe oxygen from the air	Tadpoles have gills to breathe oxygen from the water

Which of the following adaptations help native frogs survive? *(Choose as many as are advantages.)*

- Parents protect eggs and young froglets from predators.
- They do not require a pond or stream to go through their life cycle.
- There are fewer eggs.
- The young are more developed than other frogs when they hatch.

Climate change is one type of change that affects an environment and what lives there.
If the forests where the native frogs live became much drier, why might laying their eggs under rocks and logs no longer be useful for their survival?

If scientists had to move native frogs to another place, what conditions would they most likely choose? (Choose the best one.)

- Warm, windy and dry
- Cold and frosty
- Rainy, misty and cool
- By a pond, river or stream.

Explain your answer.

The Department of Conservation has only so much money to spend on saving endangered plants and animals. People have different ideas about what is important to save. Gathering different viewpoints can be a good starting point for a discussion.
This question is about how **you** feel about saving New Zealand's endangered frogs.
How would you feel if native frogs became extinct?
Choose **one** from the following list that is closest to your feelings.

○ I would be concerned that we might end up with too many insects if there were no pepeketua to eat them.	○ I would be sad that something unique to the world had disappeared.
○ They have been on Earth a lot longer than humans so have more right to be here than we have.	○ I don't really care what happens to them.
○ I don't think frogs are important enough to worry about.	○ I think there are more important things to spend money on than frogs.
○ I would worry that the environments where the frogs live would get out of balance if frogs disappeared.	○ I would be upset because I think all things have got the right to be on Earth.

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