Lesson 3a

Life cycles in changing habitats

Fact box

- Wild bison nearly became extinct and are now protected.
- Bison can live for 20 to 25 years.
- Wild polar bears can live for about 25 years.
- Arctic terns can live up to 34 years.
- Arctic terns fly up to a million kilometres in a lifetime.
- To hibernate means to hide away and sleep or to be inactive in winter.

Aim

• To identify ways in which animal life cycles are adapted to changing habitats.

Language

- Exploring information texts
- Vocabulary: Arctic tern, bison, habitat, hibernate, life cycle, migrate, migration, nest, nestling, polar bear, season, shelter, underground

Extra materials

- 1 copy of the Activity page per pupil, Audio Tracks 20 22, IWB
- www.scholastic.com/magicschoolbus Hover over Games, click Games, go to page 4 then scroll down and click The Great Habitat Match

Warm up

- Ask pupils to name the seasons. Write spring, summer, autumn, winter, wild animals, habitat on the board.
- Explain: A habitat is the place where an animal lives, finds food and shelter and has young.
- Go to the website above and follow the links to play a game, matching animals with their habitats.
- Explain that many habitats change as the seasons change and most animals match their life cycles to these changes. Ask why birds lay their eggs in the spring.

Procedure

- Hand out the Activity sheets and focus on the photo of the Arctic tern with young. Explain: Some birds travel thousands of kilometres to lay eggs in a good habitat.
- Play Audio Track 20/Read the text. Pupils listen and follow on their Activity sheet. Ask when the life cycle of an Arctic tern begins. Write *migrate* and *migration* on the board. Ask when Arctic terns migrate.
- Focus on the picture of the bison and play Audio Track 21/read the text. Pupils listen and follow on their Activity sheet. Ask what happens at the end of migration.
- Focus on the polar bear and play Audio Track 22/read the text. Ask where polar bears live, if they migrate and how their life cycle matches the seasons.
- Write the Fact box information on the board and read through it with the class.
- Display the IWB for the pupils to complete Tasks 1 to 3.
- Allow 15 minutes for the pupils to work individually, in pairs or groups to complete the table using information from the Activity sheet and the Fact box. Check the answers with the class.

Follow up

- Pupils compare and discuss their answers in groups and then report their findings to the class.
- Make a zigzag book about an animal, e.g. a swallow, penguin or whale, comparing the stages of its life cycle to the changing weather during each season.



Useful websites (see also Extra materials above)

- www.bbc.co.uk/learningzone/clips
 Type 5502, click SEARCH, then Polar bears must adapt to melting ice caps
- www.rspb.org.uk/youth/learn Click *Migration*
- www.abc.net.au/schoolstv/animals
 Click In the air to learn about Australian animals' habitats

Search terms: migration, hibernation, habitat

Cross curricular links

Science • animals, plants and habitats – 3.1a Literacy • Polar bear, why is your home melting? Geography • identify climatic regions • map migration routes

Life cycles in changing habitats

• individual or paired research

by Robert E. Wells

• global responsibility – 9.3a & b

Life cycles in changing habitats

120 Arctic terns

Arctic terns are seabirds. In May and June Arctic terns nest on the ground in the Arctic. They feed their chicks on sand eels, small fish and insects. In September, when the young birds have grown and winter is coming, they begin to fly south. When they reach the Antarctic the southern summer has begun. The birds fish in the sea but they do not land on the snow and ice. In March, when it begins to grow colder and darker, they migrate north again. Arctic terns fly more than 35,000 kilometres every year to match their life cycle to the changing seasons.





T21 Bison

Wild bison live in the grasslands of North America. In the spring they migrate hundreds of kilometres northwards to places such as Yosemite, where there has been thick snow all winter. Most calves are born in grassy meadows at the end of the migration. When the calves have grown and there is little grass left, the herds migrate southwards before the snow falls again.

Polar bears

Polar bears live in the Arctic where it is very cold and snowy. Winter lasts for six months and it is dark all the time. The bears have thick fur to keep them warm. Female bears hibernate in winter. They dig dens in the snow where it is warmer. Their cubs are born in the dens and grow up in a safe place, away from male bears which might kill and eat them. They leave the den in the spring when their mothers go out to catch fish and seals.



	Polar bears	Arctic terns	Bison
Where do they live?			
What do they eat?			
When are they born?			
Where are they born?			in a meadow
What are the young called?		chicks	
How long do they live?			
Do they hibernate?			
Do they migrate?	no		
One more fact			