Desert survivors: answers

What your child practised: how camels, desert foxes and cacti are adapted to heat, sand and little water (Year 6 science).

Page 1 · Warm up

Hump full of water: **F** (it stores fat) · Spines are a kind of leaf: **T** · Many desert animals rest by day: **T** · Big ears keep a fox warm: **F** (they help it lose heat)

Page 2 · Try it together

The flat sheet dries first: more surface is open to the air. The rolled sheet stays damp longer; the one in cling film longest, like a cactus's waxy stem.

Page 2 · A. Fill the gaps

1 **fat** · 2 **eyelashes** · 3 **nostrils** · 4 **feet** · 5 **night** · 6 **roots**

Page 3 · B. The table

Ears: **feature**, let heat escape.
Lizard: **behaviour**, avoids the hottest sun.
Spines: **feature**, lose less water than leaves; protect it.
Drinking lots: **behaviour**, stocks up when water is rare.

Page 3 · C. Plants

Plant 1, the cactus. It has spines, not wide leaves, so it loses less water; its thick stem stores water. Plant 2's many big, thin leaves would lose lots of water.

Page 3 · D. Design

Answers will vary. Each label should say how it helps.

Challenge: No. The hump stores **fat**, not water. The camel uses the fat for energy when food is scarce, and keeping fat in one place helps heat escape from the rest of its body. Camels save water in other ways, then drink lots when they can.

Watch out for

- **"The hump holds water."** A very common belief. Ask: "What would a camel need when there's no food?" (energy, from fat).
- **"Big ears keep it warm."** Big ears **lose** heat. That's why desert foxes have big ears and Arctic foxes have small ones (Chapter 3).

Going further (5 minutes, no paper)

- **Plant detective:** compare a cactus or succulent with a leafy houseplant. Which would lose more water in a hot, dry place, and why?
- **In the game:** Chapter 3, Polar adaptations, flips the problem: how do animals keep warm in the freezing cold?