Climate change scenarios script

For the teacher to read during the TESTING stage

Read enthusiastically to engage students. Pause for questions and block/token removal as indicated.

Summary of scenarios

- Ice sheets and snow melt
- Ocean warming and acidification
- Sea level rise and flooding
- Drought, fires, and extreme storms
- Habitat destruction
- Disrupted food chains

Script

The world is getting warmer. The sun shines hotter and the weather is becoming unpredictable. This isn't just a few hotter days, these changes are transforming the homes of animals and plants everywhere.

Far away in the Arctic and Antarctic, massive ice sheets are melting. White, sparkling glaciers are shrinking, cracking and breaking apart. On distant mountains, snow is retreating, leaving bare rock exposed.

Pause: Do any creatures need ice or snow for shelter, hunting or camouflage (e.g., polar bears, snow leopards). If yes, **remove a block, unless** perhaps your creature has insulation, a coat that changes colour or burrowing adaptations – maybe they survive?

At the same time, the oceans are heating up and becoming more acidic. Tiny creatures with calcium carbonate shells, like snails and corals, struggle to grow. Some die or are eaten more easily, which changes the food available for other animals.

Pause: Does your creature rely on coral reefs, shellfish, or calcium-based structures for food or shelter? If yes, **remove one block, unless** they have adaptations like moving to cooler waters, armour or using other food sources.

As the temperature ramps up, melting ice becomes water. Rivers swell, lakes rise and oceans creep higher onto the land. Beaches disappear under waves and inland valleys flood. Habitats that were once safe are now underwater.

Pause: Do any creatures live in or next to oceans, rivers, or lakes? If yes, **remove a block, unless** they have adaptations (like floating, swimming, burrowing) that could protect them.

The land is changing in other ways too. Forests and grasslands are becoming drier, making bushfires more likely. Flames leap through trees, smoke fills the air, and some animals must flee or face disaster.

Pause: Does anyone's creature live in dry bushland or fire-prone areas? If yes, **remove a block, unless** they store water, burrow, or have fire-resistant traits.

Storms are becoming more intense too. Thunder roars, lightning flashes and rain pours down in sudden, violent bursts. Homes and food sources are destroyed, and fragile habitats are washed away.

Pause: Do any creatures rely on delicate habitats like tree canopies, coral reefs, or stable nesting sites? If yes, **remove one block, unless** they have storm-adapted features.

Food is harder to find. Plants bloom or fruit earlier than usual, disrupting timing for pollinators like bees and animals that depend on them may go hungry. Predators may find their prey has moved, vanished, or is too few to sustain them.

Pause: Does your creature rely solely on one type of food source? If yes, **remove a block, unless** your creature can switch diet, store food or travel far, far away to a new home.

Even creatures designed to adapt may struggle. Every change affects another: melting ice leads to flooding, rising temperatures lead to more frequent and intense extreme weather events like fires and droughts. And all of this disrupts food chains. The world is interconnected, and survival in this changing climate is a challenge like never before.

Storytelling tips for teacher

- Use **dramatic pauses and voice changes**: whisper when describing melting ice, raise your voice for storms, slow down for droughts
- Include **real-world examples**:
    - Polar bears, penguins (ice)
    - Koalas (fires and drought)
    - Sea turtles (coastal flooding)
    - Monarch butterflies (timing of food)
- Encourage student engagement: students physically remove a block when their creature is affected, reinforcing cause-and-effect
- Emphasise interconnectedness: each change leads to another, making survival unpredictable