

## Unit 11 lesson 3 Land Adaptations

### Forests

- warm summers / cold winters

#### Animal Adaptations

- Adapted to climb & live in trees
- Birds → clawed feet to perch on tree branches
- Insects / woodpeckers' beaks are adapted to dig into wood
- Camouflage

#### Plant Adaptations

- Deciduous Trees: lose leaves during winter to prevent water loss
- Trees have wide leaves to absorb light
- vines climb trees so they can reach sunlight



### Jungle (Tropical Rain Forest)

- \* Found near equator
- \* warm / rainy year round

#### Animal Adaptations

- \* colorful: usually poisonous
- Jaguar → sharp claws to climb
- Sloths → long arms & claws to hang from branches
- Monkeys → use their hands, feet, & tails to hang on branches
- Howler Monkey: loud calls to communicate

#### Plant adaptations

- 3 levels: plants are adapted to receive a lot of sunlight to very little sunlight
- Trees have shallow roots → adapted to grow roots from branches & some form a wall of roots (buttress)
- Trees stay green all year



## Unit 11 Lesson 3 Land Adaptations

### Taiga

- \* Northern habitats
- \* Very cold winters / short warm <sup>not hot</sup> summers

#### Animal Adaptations

- thick fur to stay warm
- Camouflage
- Birds → migrate (move away during the cold weather)
- Strong beaks to open pine cones →

#### Plant Adaptations

- Evergreens - stay green all year.  
Pine trees
- Trees are pointed & have flexible tops to withstand the weight of snow
- Conifer trees grow seeds inside of pine cones
- Dark green to help absorb more light

### Grassland

- Africa / North America
- low rainfall (fires are common) \* warm

#### Animal Adaptations

- Flat teeth to chew grass (elephants, zebra, bison)  
↳ stomach to help digest
- Fast Runners (cheetahs/gazelles)
- Camouflage (patterns)
- Hunting Animals: long legs, sharp teeth, claws, good eye sight, powerful jaws
- Burrowing Animals → strong paws to dig in the ground
- Giraffes → tough mouths to eat thorned plants

#### Plant Adaptations

- Grasses have long root systems where energy is stored.
- Grasses are long & narrow to conserve water
- Few trees
- Thorns protect against animals
- After fires, grasses grow back quickly due to the roots



## Unit 11 Lesson 3 Adaptations on Land

### Desert

- Middle East • North America (South Western) • North Africa
- Sandy, rocky, dusty, dry
  - Very little rain fall
- Extremely HOT during the summer days
  - Very Cold during winter at night

### Animal Adaptations

- Most animals are nocturnal
  - \* Sleep during day
- Camels → drink large amounts of water & store it in their humps
  - Wide feet to walk on Sand
  - Long eye lashes + close nostrils to keep sand out
- Snakes - move sideways through the sand

### Plant Adaptations

- cacti → large stem to store water
  - Waxy leaves & coating to keep water in
  - thorns keep predators away
- Shallow roots - to soak up water quickly.

### Polar / Tundra

- \* North & South Poles • Icy all year
- Ground below is always frozen top layer melts during summer

### Animal Adaptations

- Excellent swimmers
- Close nostrils when swimming
- Thick layers of fat
- Water proof feathers

### Ptarmigan Bird

- Changes coat & feathers depending on season
- (Camouflage)

### Plant Adaptation

- Quick growth & reproduction (only during summer)
- Dormant during winter
- Fuzzy leaves → prevents snow from collecting
- Lichens grow on rocks