

NATURAL SCIENCES & TECHNOLOGY

RESOURCE PACK
GRADE 5 TERM 4

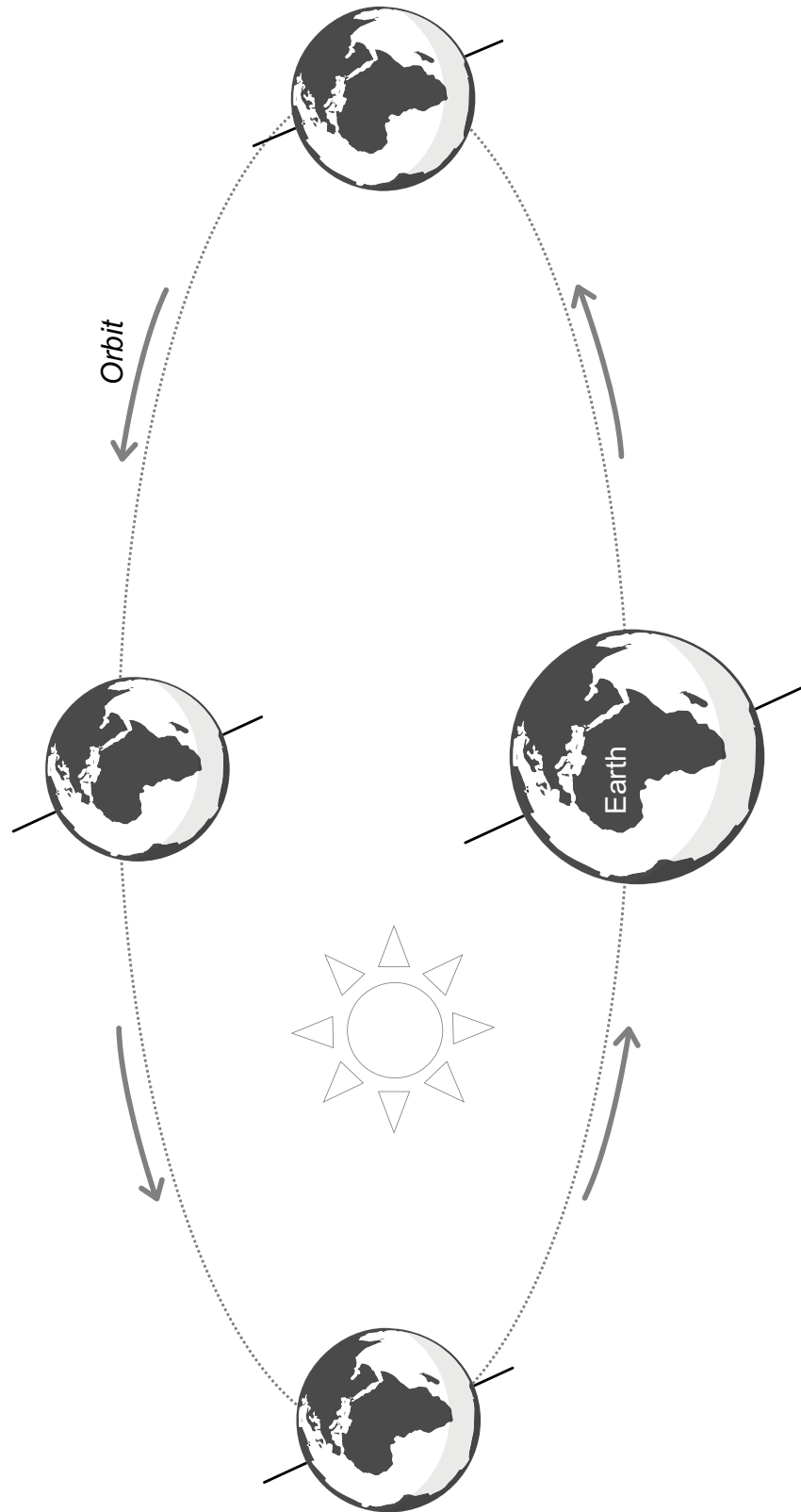


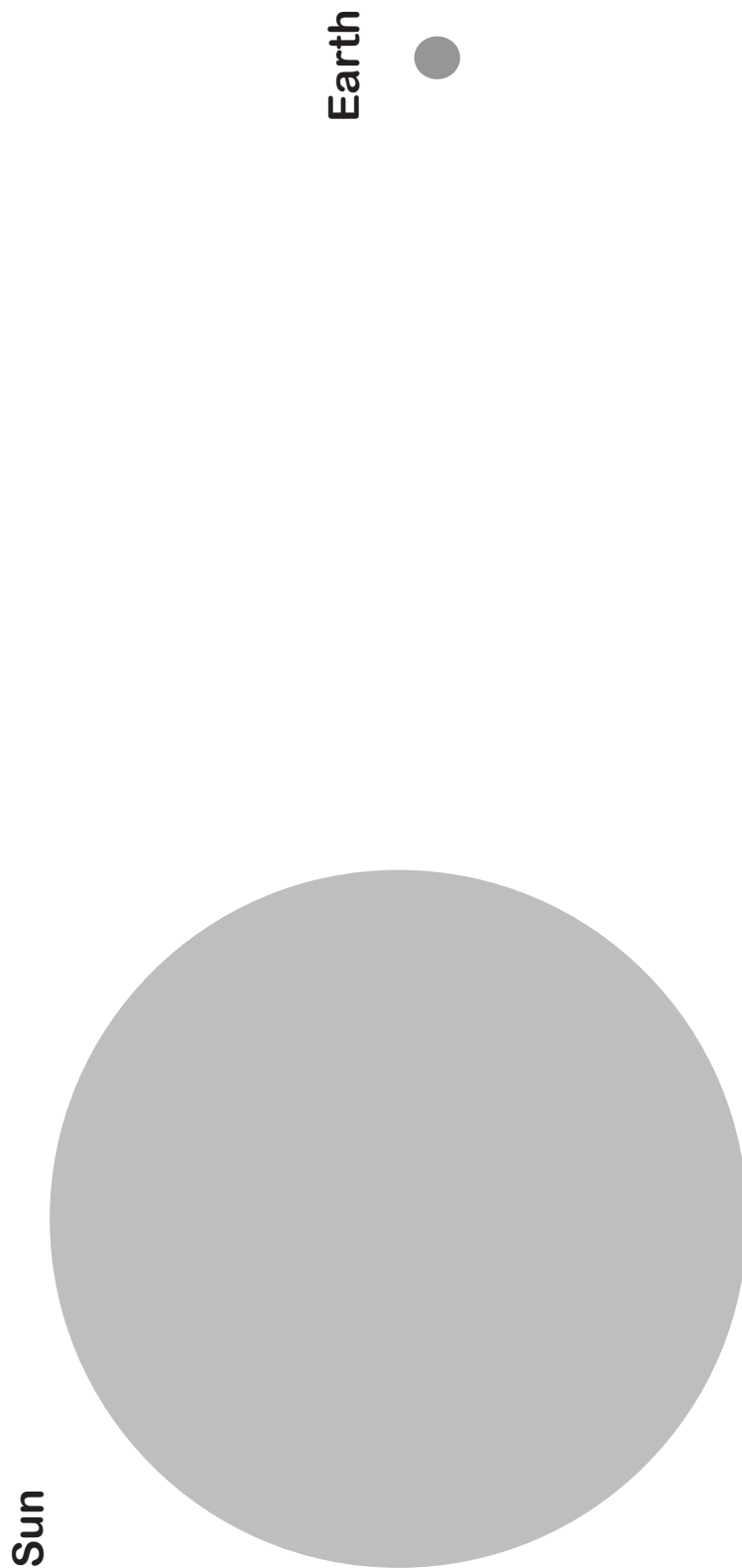
GRADE: 5 TERM: 4 STRAND: PLANET EARTH

RESOURCE 1

https://upload.wikimedia.org/wikipedia/commons/8/8b/North_season.jpg

THE EARTH'S ORBIT AROUND THE SUN



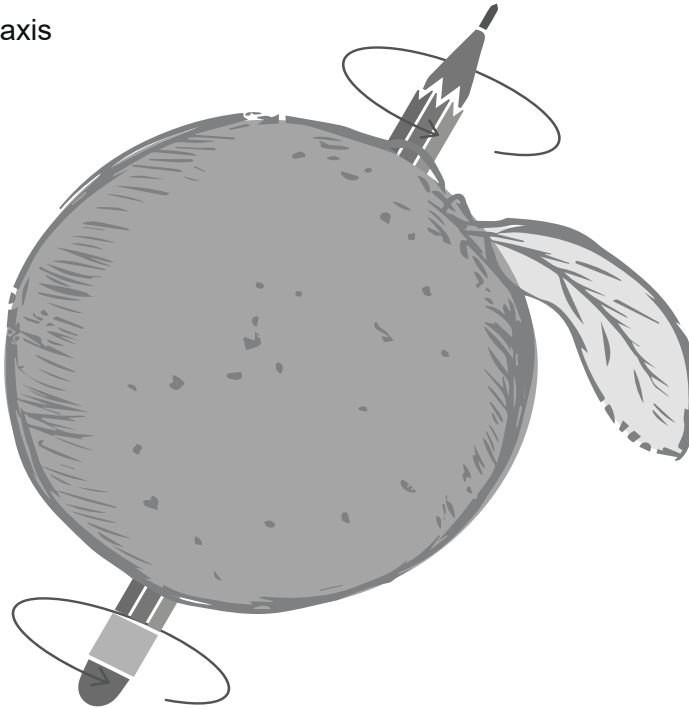


RESOURCE 3

THE EARTH SPINNING ON ITS AXIS

The pencil through this orange is like the axis

The orange spins around the axis



The axis runs from the North Pole to the South Pole

The Earth spins around its axis

The Earth spins in an anti-clockwise direction – to its left



RESOURCE 4

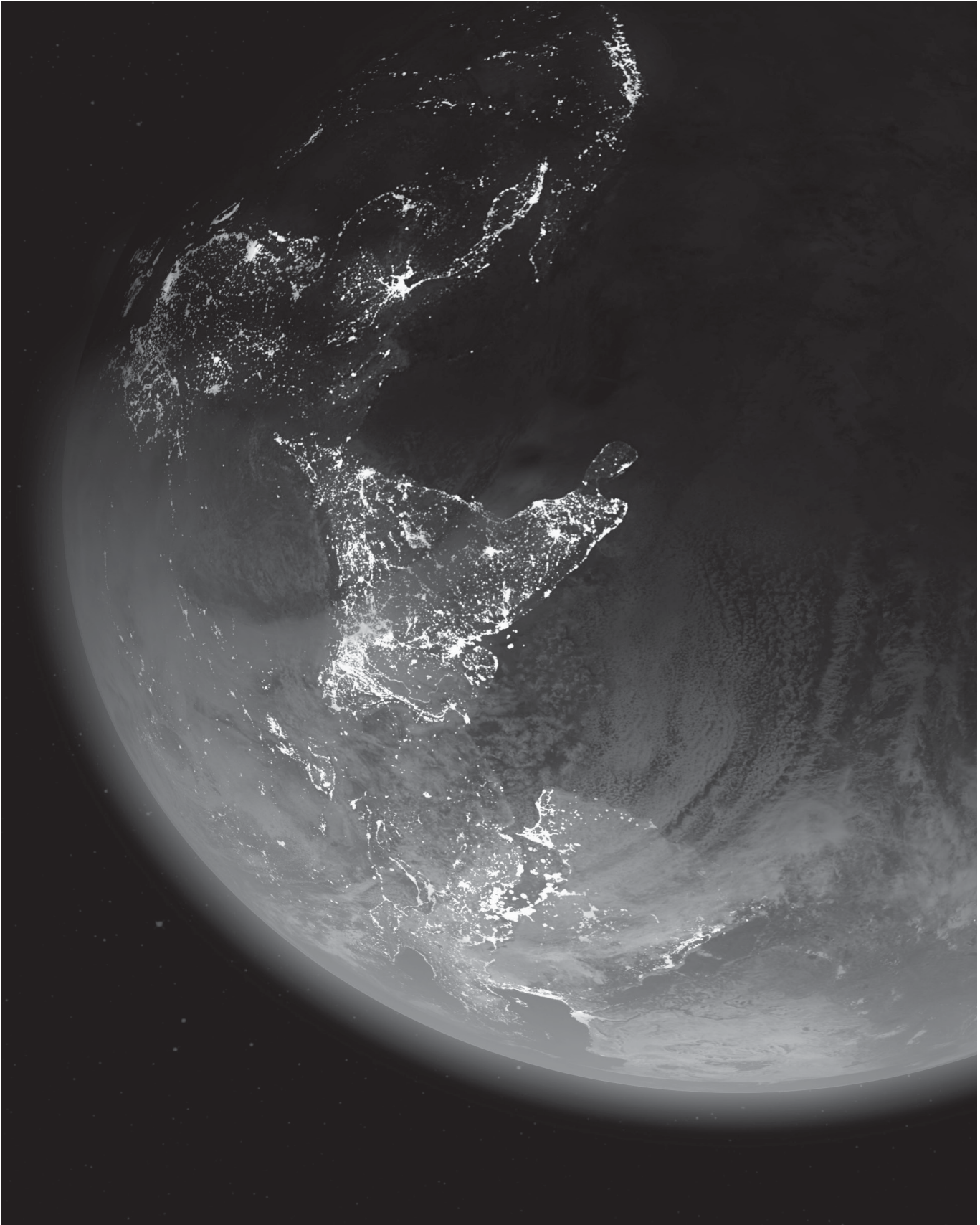
A GLOBE



RESOURCE 5

https://static.turbosquid.com/Preview/2014/07/12__01_26_58/clip_13.png25ba-da1e-1206-495b-a922-09b8706e47b1Original.jpg

DAY AND NIGHT

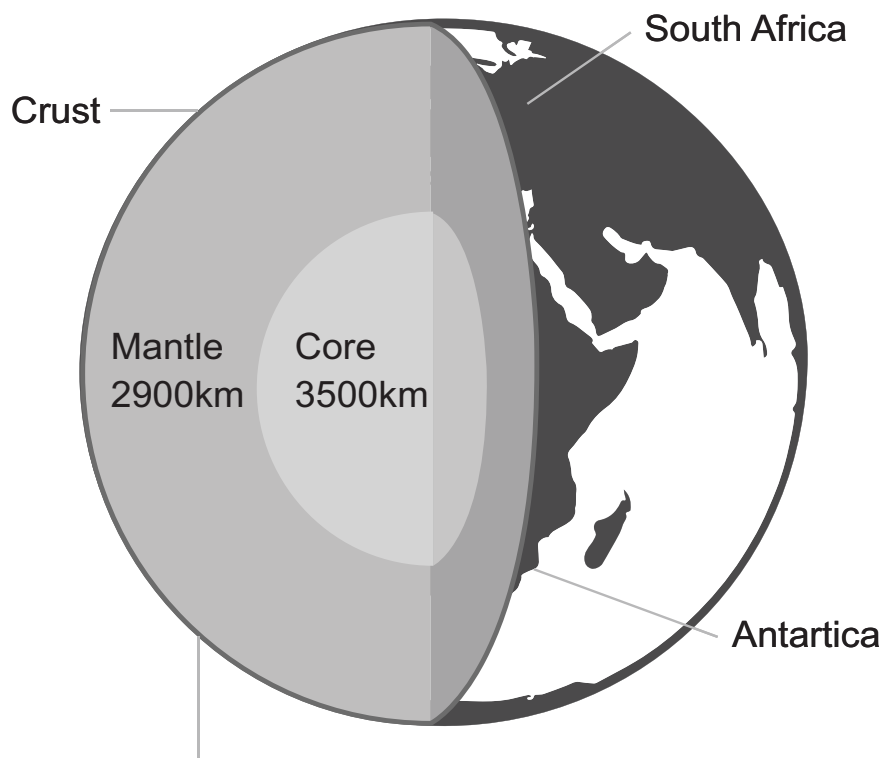


RESOURCE 6

THE CRUST, MANTLE AND CORE OF THE EARTH



Taking a slice out of the Earth



The Crust may be 10 km thick under an ocean, but up to 70km thick under a continent.

The crust, mantle and core of the Earth

RESOURCE 7

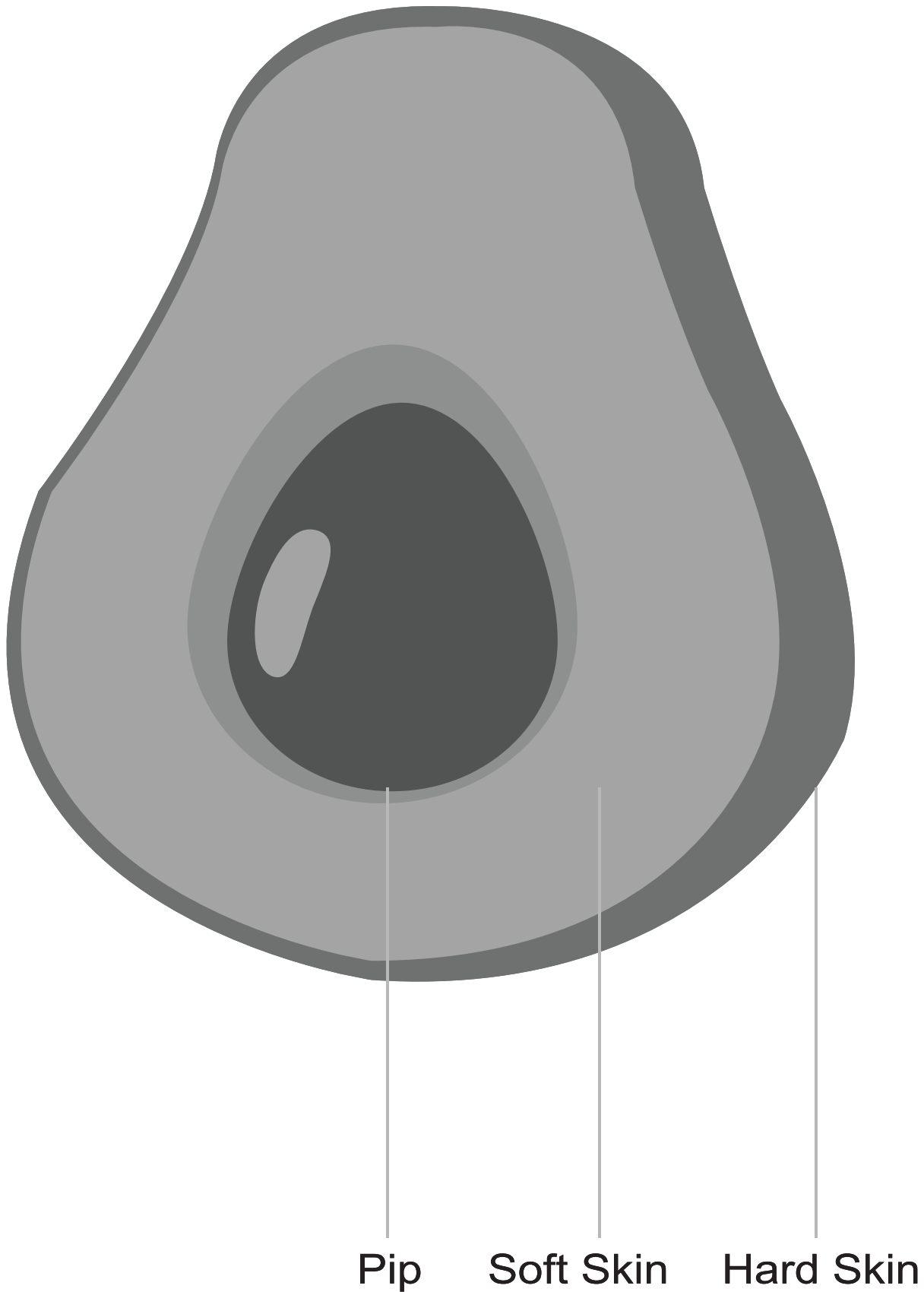
https://upload.wikimedia.org/wikipedia/commons/c/c4/Gallery_medieval_silver_mine_Germany_southern_Black_Forest_12th_century.jpg

INSIDE A GOLD MINE



RESOURCE 8

A CROSS-SECTION OF AN AVOCADO



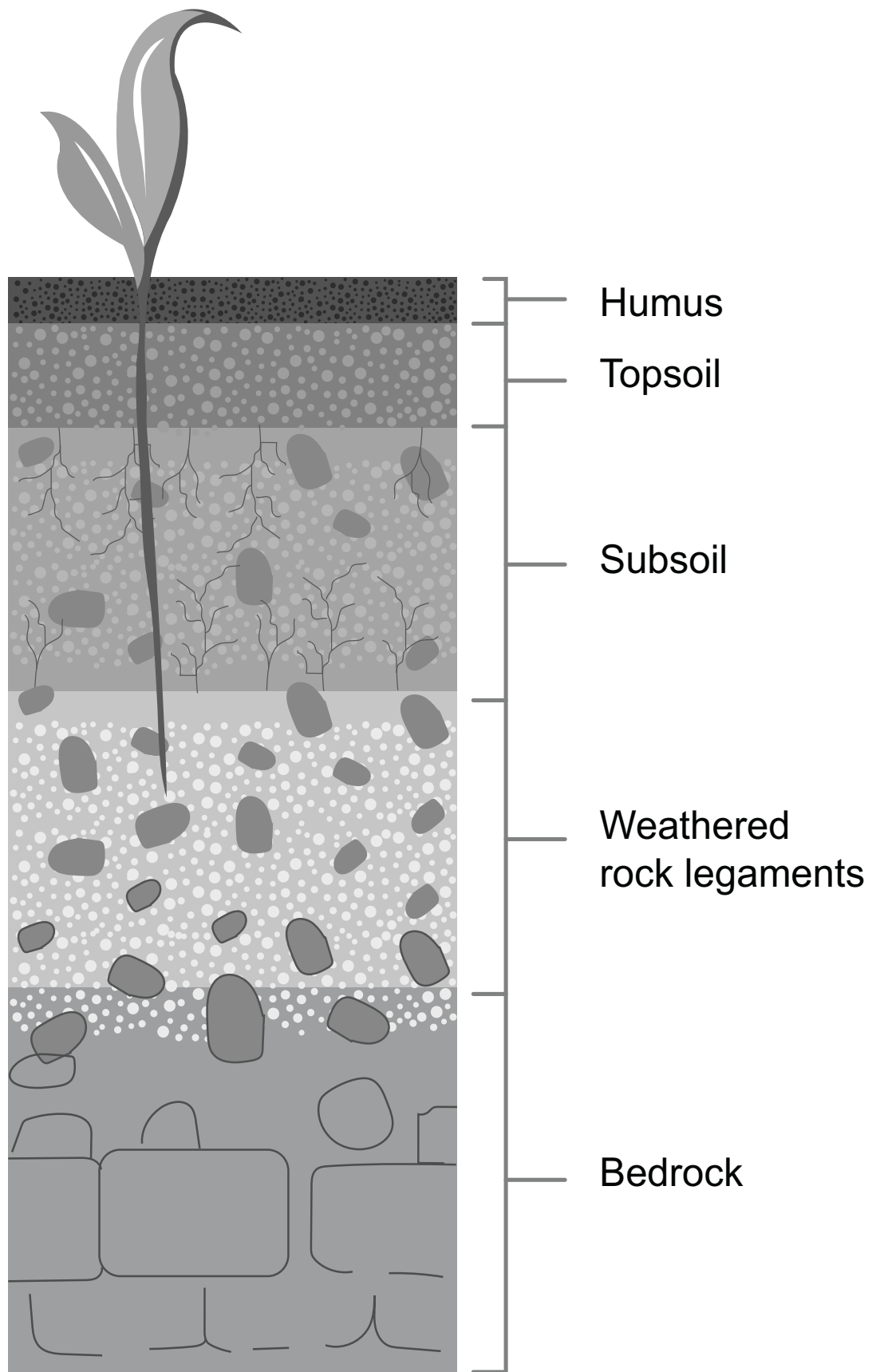
RESOURCE 9

PLANTS AND ANIMALS NEED TOPSOIL TO LIVE



RESOURCE 10

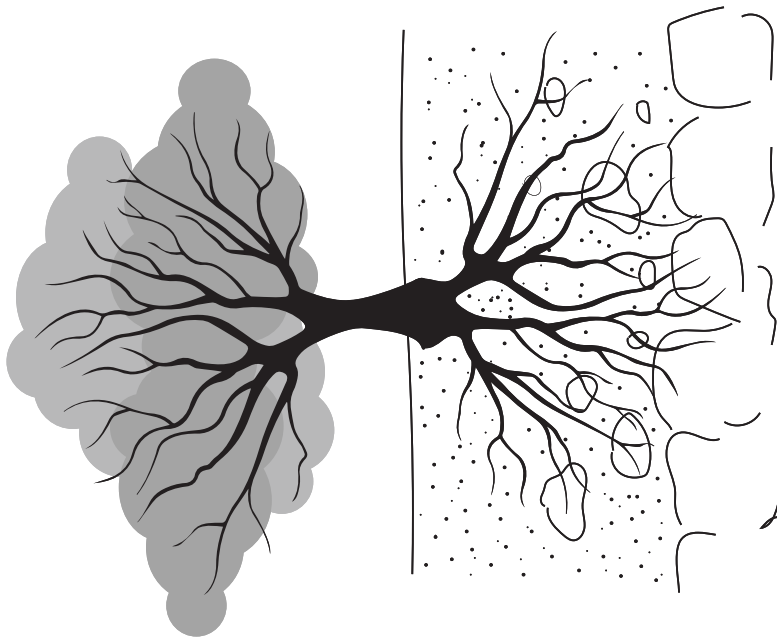
LAYERS OF THE EARTH'S CRUST



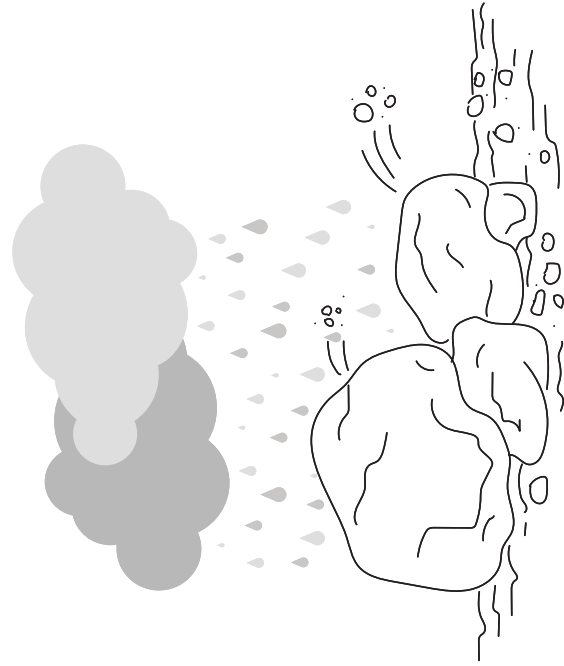
HOW ROCKS ARE FORMED



Animals and people break up stones by walking on them



The roots of trees and plants break up rocks
By splitting them



Weather can break up rocks by cooling them down quickly

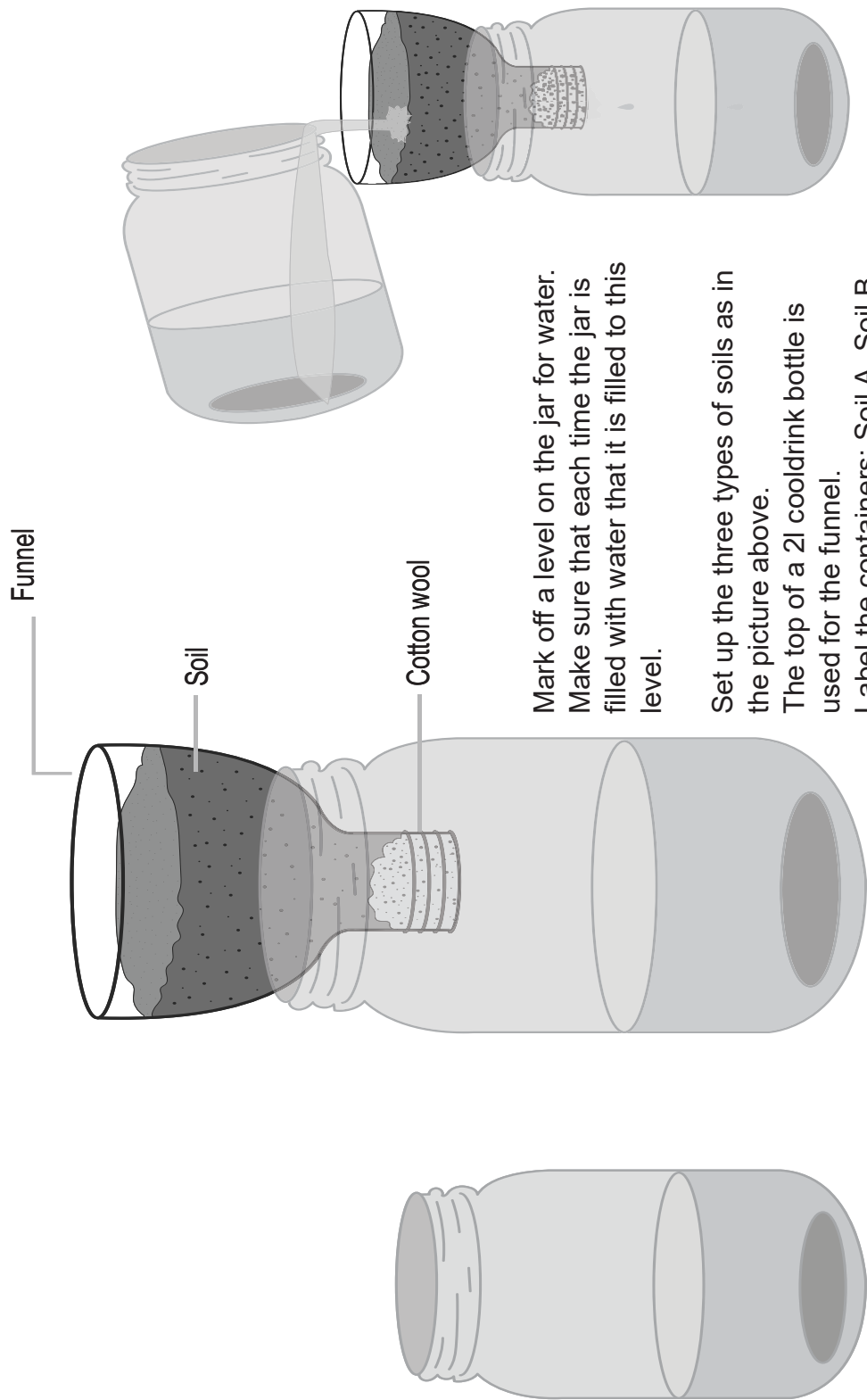
RESOURCE 12

https://upload.wikimedia.org/wikipedia/commons/2/22/Xhosa_Rondavel.JPG

<https://static.pexels.com/photos/271383/pexels-photo-271383.jpeg>

CLAY PRODUCTS





Mark off a level on the jar for water.
 Make sure that each time the jar is filled with water that it is filled to this level.

Set up the three types of soils as in the picture above.
 The top of a 2l cooldrink bottle is used for the funnel.

Label the containers: Soil A, Soil B, Soil C.

Pour the same amount of water over each funnel filled with soil.

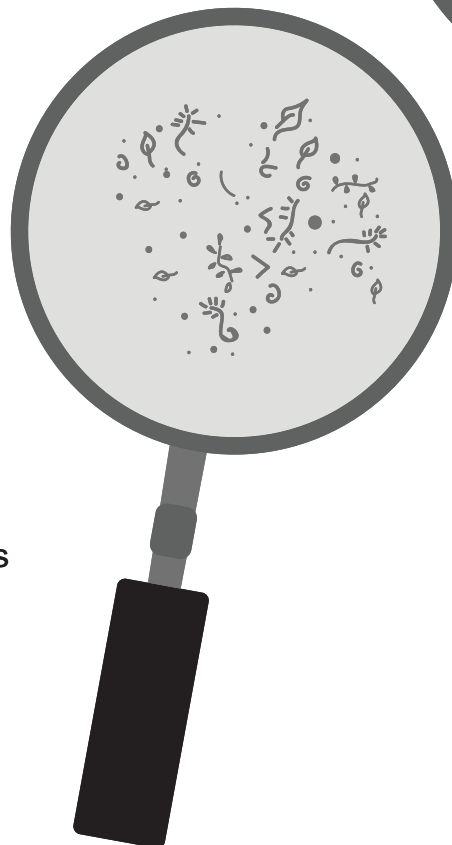
Rock Particles



Parts of
dead animals

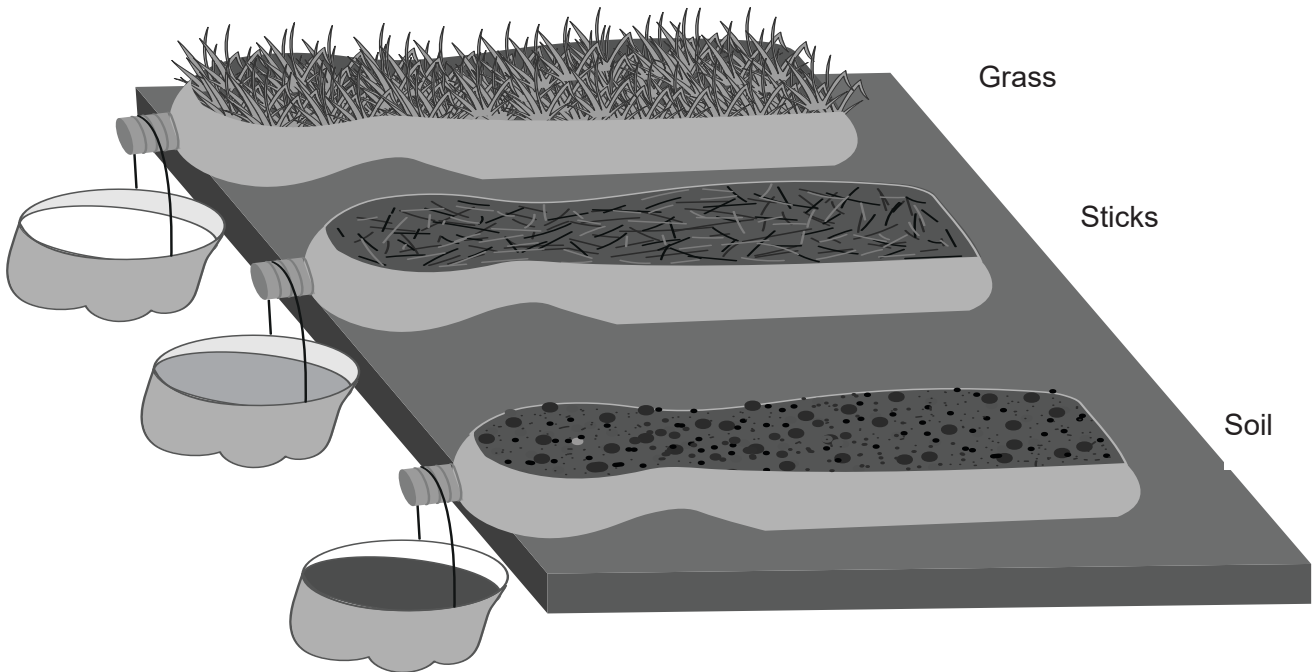
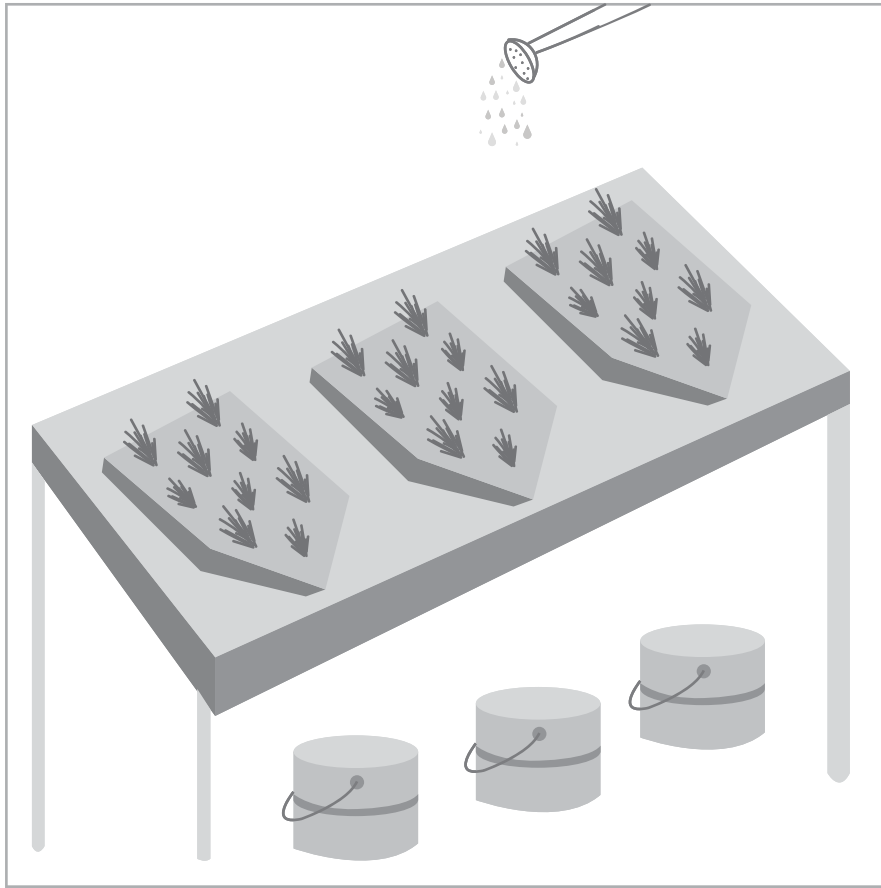


Parts of
dead plants



RESOURCE 15

PREVENTING EROSION: TWO INVESTIGATIONS



RESOURCE 16

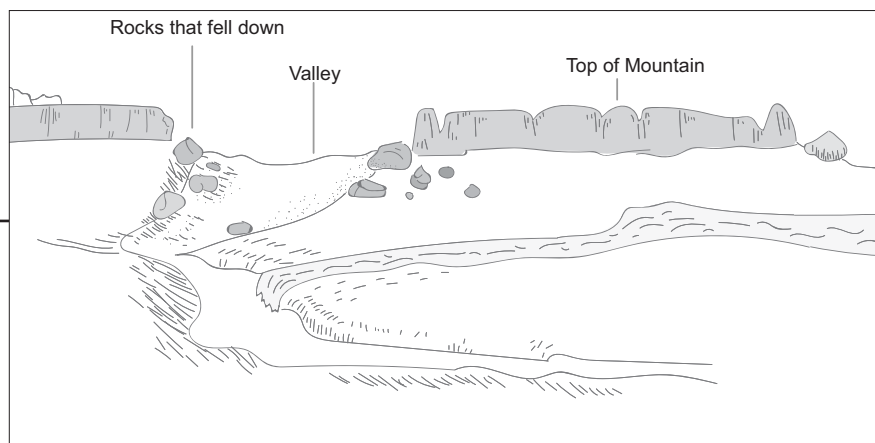
THE STAGES OF SEDIMENTARY ROCK FORMATION

Rocks are **weathered**



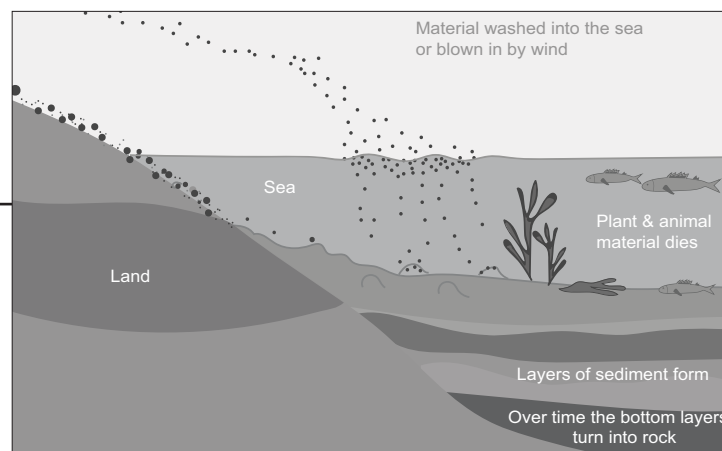
Rock is broken into small pieces by wind and rain

Small rocks, sand and mud are eroded



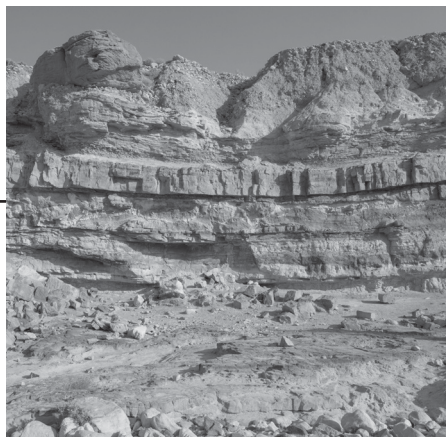
Smaller particles of rock, sand and mud (sediment) are moved by wind or rain

Sediment is deposited in layers over time

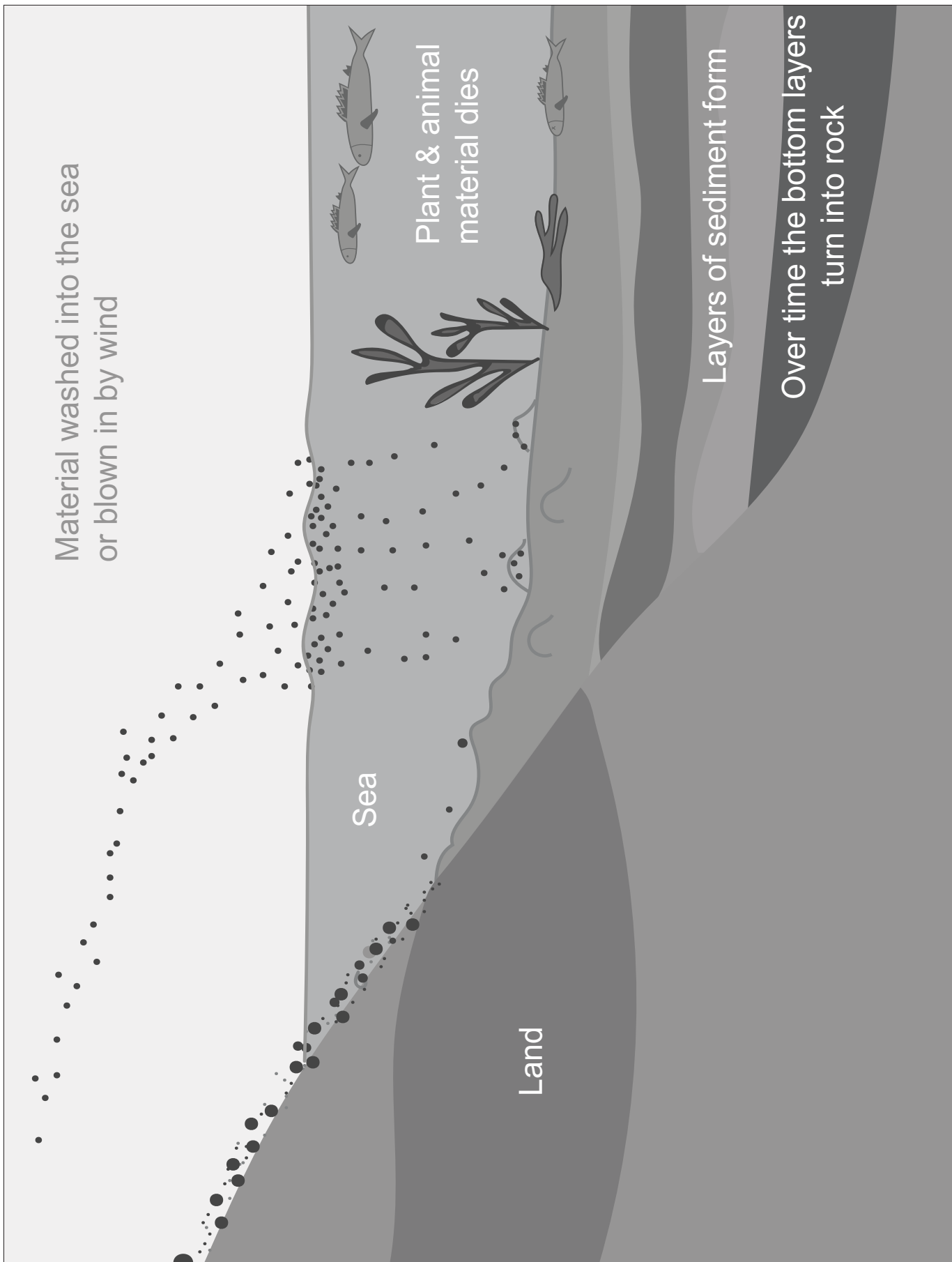


New layers of sand and mud are deposited over layers already there

These layers become compacted and harden to form sedimentary



Sedimentary rock is formed in layers



RESOURCE 18

https://upload.wikimedia.org/wikipedia/commons/e/e1/Layers_of_sedimentary_rock_in_Makhtesh_Ramon_%2850754%29.jpg

LAYERS OF SEDIMENTARY ROCK



RESOURCE 19

https://upload.wikimedia.org/wikipedia/commons/f/fe/USA_09855_Grand_Canyon_Luca_Galuzzi_2007.jpg

SANDSTONE, SHALE AND LIMESTONE LAYERS



RESOURCE 20

<https://upload.wikimedia.org/wikipedia/commons/0/0d/RobbenIslandSteinbruchA.jpg>

NELSON MANDELA CHIPPING AWAY AT LIMESTONE ON ROB BEN ISLAND



RESOURCE 21

<https://upload.wikimedia.org/wikipedia/commons/0/0d/RobbenIslandSteinbruchA.jpg>

THE LIMESTONE QUARRY ON ROB BEN ISLAND



RESOURCE 22

https://upload.wikimedia.org/wikipedia/commons/4/42/Pont_du_Gard_BLS.jpg

A BRIDGE IN FRANCE OVER 2000 YEARS AFTER BEING BUILT



RESOURCE 23

https://upload.wikimedia.org/wikipedia/commons/c/c5/Bloukrans_Bridge-001.jpg

STORMS RIVER BRIDGE: EASTERN CAPE



RESOURCE 24

https://upload.wikimedia.org/wikipedia/commons/7/77/Red_sandstone_relief_from_the_pyramid_chapel_of_Queen_Shanakdakhete_-_British_Museum.jpg

FROM A PYRAMID CHAPEL: EGYPT



RESOURCE 25

https://upload.wikimedia.org/wikipedia/commons/d/d4/SA_Pretoria_Union_Buildings.JPG

THE UNION BUILDINGS: PRETORIA



RESOURCE 26

https://upload.wikimedia.org/wikipedia/commons/thumb/d/da/City_hall_CT.JPG/1280px-City_hall_CT.JPG

THE CITY HALL: CAPE TOWN



RESOURCE 27

https://upload.wikimedia.org/wikipedia/commons/c/c5/Fossil_-_Schleie_%28Tinca%29.jpg

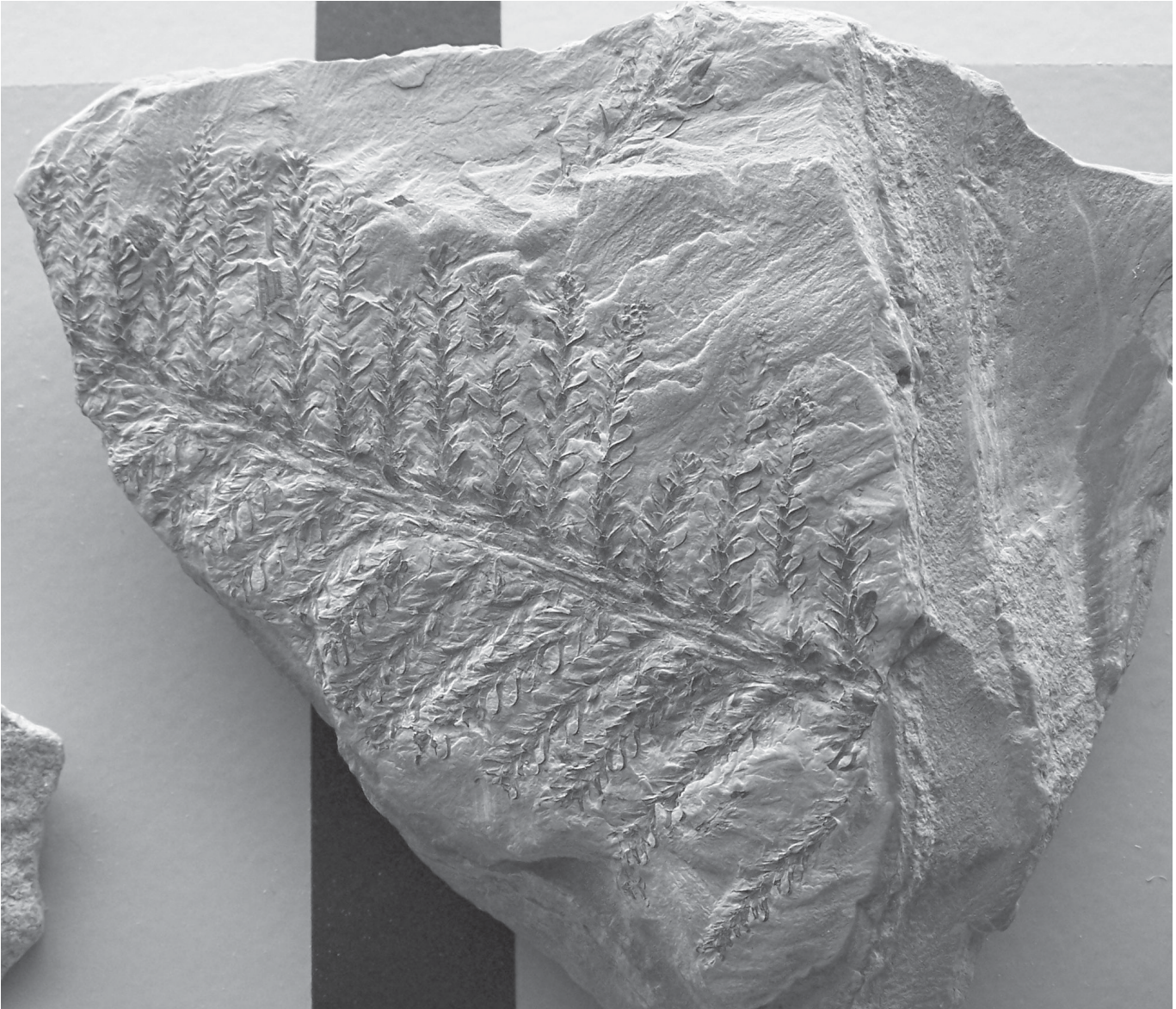
A FISH FOSSIL



RESOURCE 28

https://upload.wikimedia.org/wikipedia/commons/3/30/Walchia_piniformis.jpg

A FOSSILISED PLANT



RESOURCE 29

https://commons.wikimedia.org/wiki/Commons:Photo_challenge/2015_-_September_-_Fossils#/media/File:Steneosaurus_Holzmaden.jpg

A SALT WATER CROCODILE – 185 MILLION YEARS OLD



RESOURCE 30

https://upload.wikimedia.org/wikipedia/commons/9/9e/August_1%2C_2012_-_Massospondylus_carinatus_Fossil_Skull_on_Display_at_the_Royal_Ontario_Museum_%28BP-I-4934%29.jpg

MASSOSPONYLUS: A FOSSIL FROM 200 MILLION YEARS AGO



RESOURCE 31

https://upload.wikimedia.org/wikipedia/commons/2/2d/Massospondylus_1_NHM.jpg

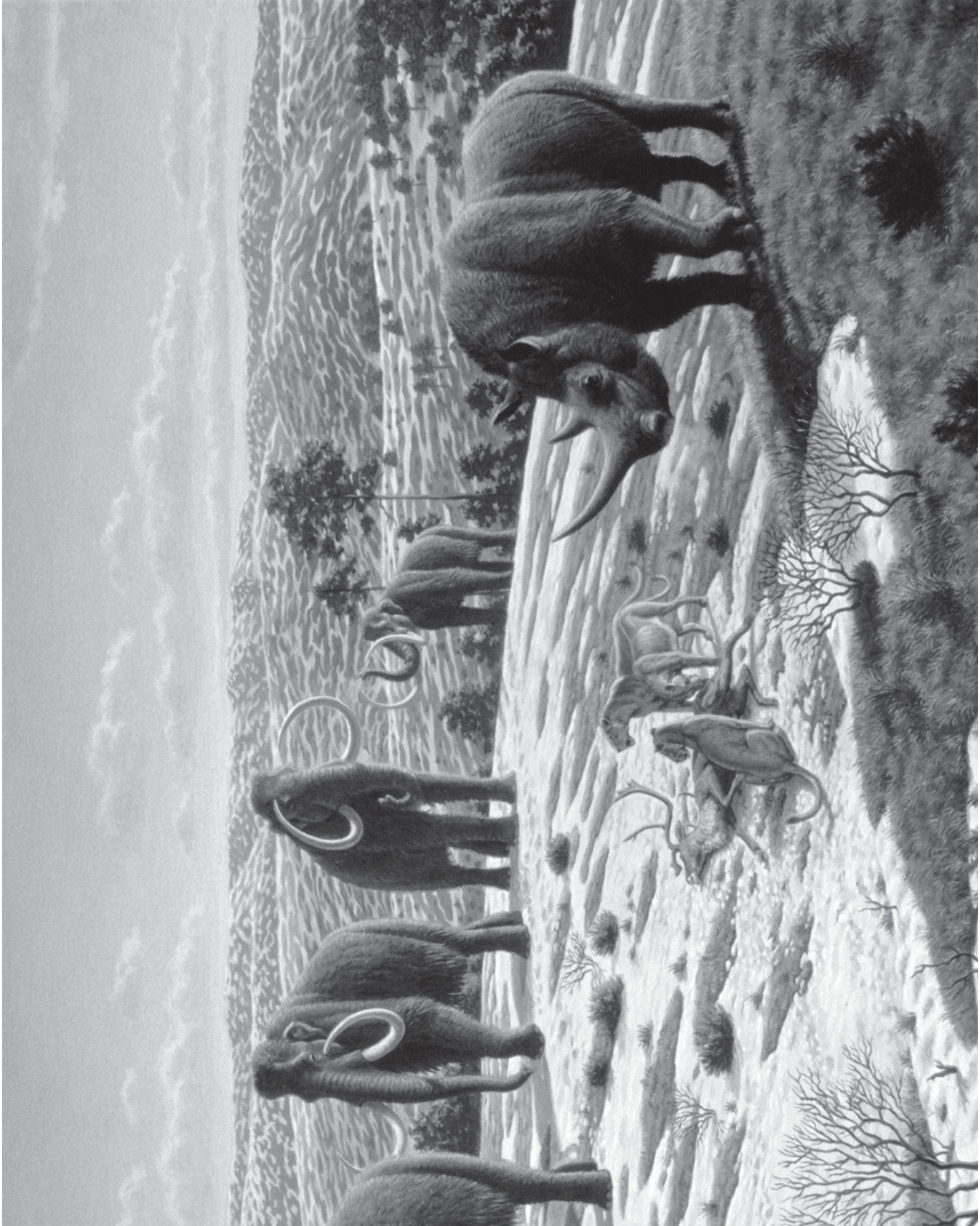
A SKELETON OF MASSOSPONDYLUST



RESOURCE 32

https://upload.wikimedia.org/wikipedia/commons/e/e6/Ice_age_fauna_of_northern_Spain_-_Mauricio_Ant%C3%B3n.jpg

WOOLLY MAMMOTHS



RESOURCE 33

https://upload.wikimedia.org/wikipedia/commons/c/c1/Ant_in_amber1.jpg

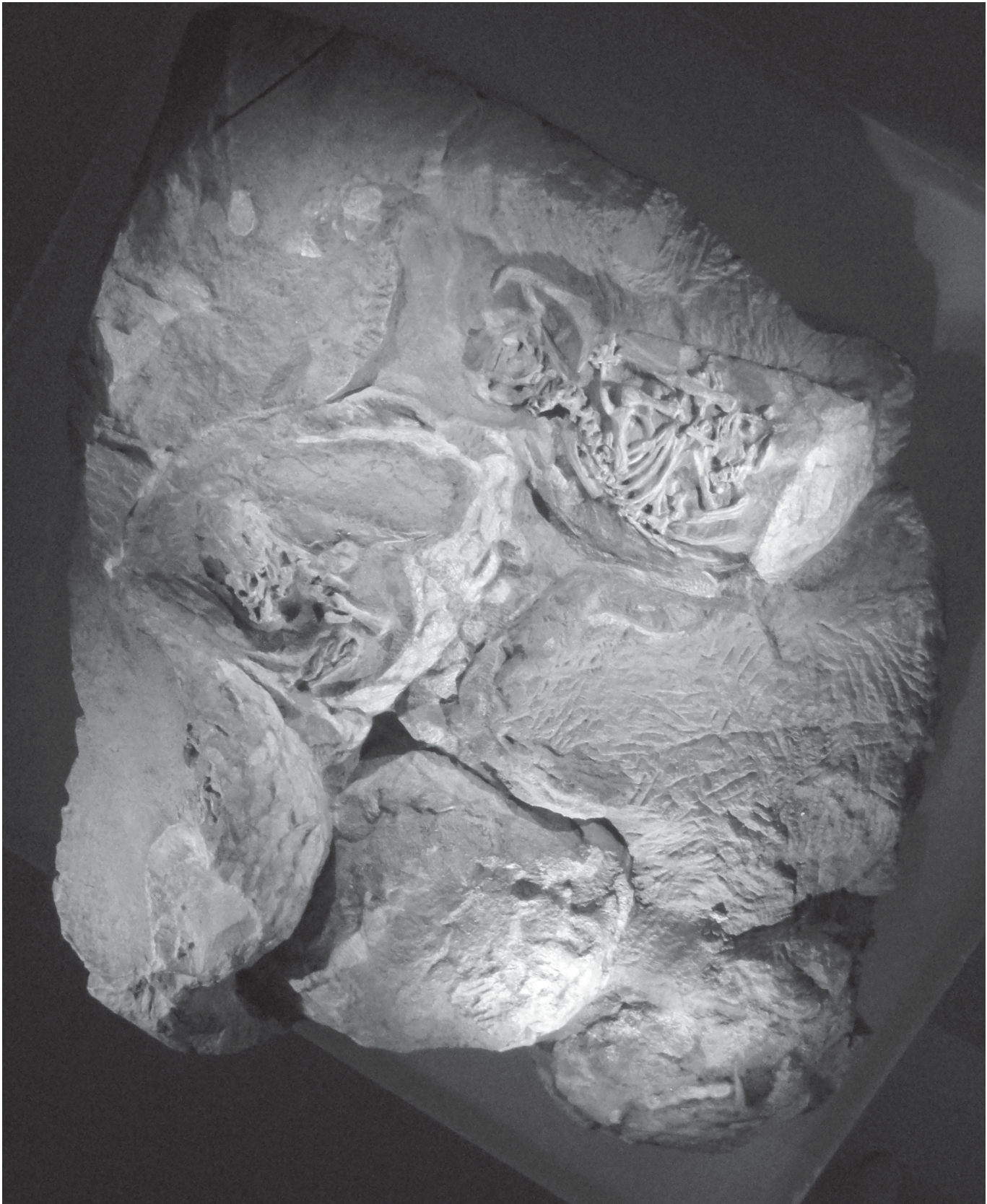
AN ANT IN AMBER: 50 MILLION YEARS OLD



RESOURCE 34

https://upload.wikimedia.org/wikipedia/commons/a/af/Massospondylus_egg_clutch_with_embryos_%28cast%29%2C_Golden_Gate_National_Park%2C_South_Africa%2C_Early_Jurassic_-_Royal_Ontario_Museum_-_DSC00145.JPG

MASSOSPONDYLUS EGGS AND EMBRYOS



RESOURCE 35

https://upload.wikimedia.org/wikipedia/commons/b/bd/Early_Cretaceous_Plant_Fossils.jpg

https://upload.wikimedia.org/wikipedia/commons/7/78/Cycad_leaves_semicircle.jpg

A CYCAD FOSSIL AND A LIVING CYCAD

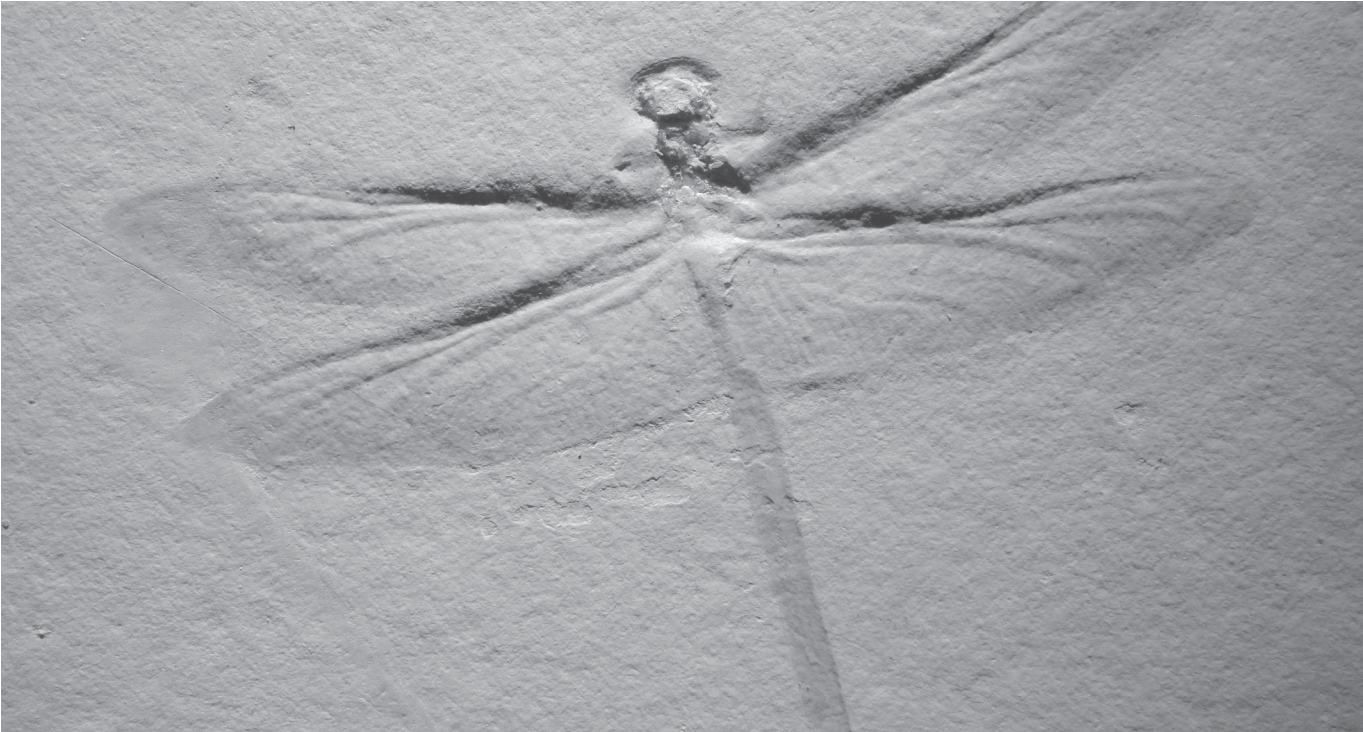


RESOURCE 36

<http://www.publicdomainpictures.net/pictures/140000/velka/dragonfly-1444759568mxj.jpg>

https://upload.wikimedia.org/wikipedia/commons/e/ef/Mesurupetala%2C_dragonfly%2C_Late_Late_Jurassic%2C_Tithonian_Age%2C_Solnhofen_Lithographic_Limestone%2C_Solnhofen%2C_Bavaria%2C_Germany_-_Houston_Museum_of_Natural_Science_-_DSC01817.JPG

A DRAGONFLY FOSSIL



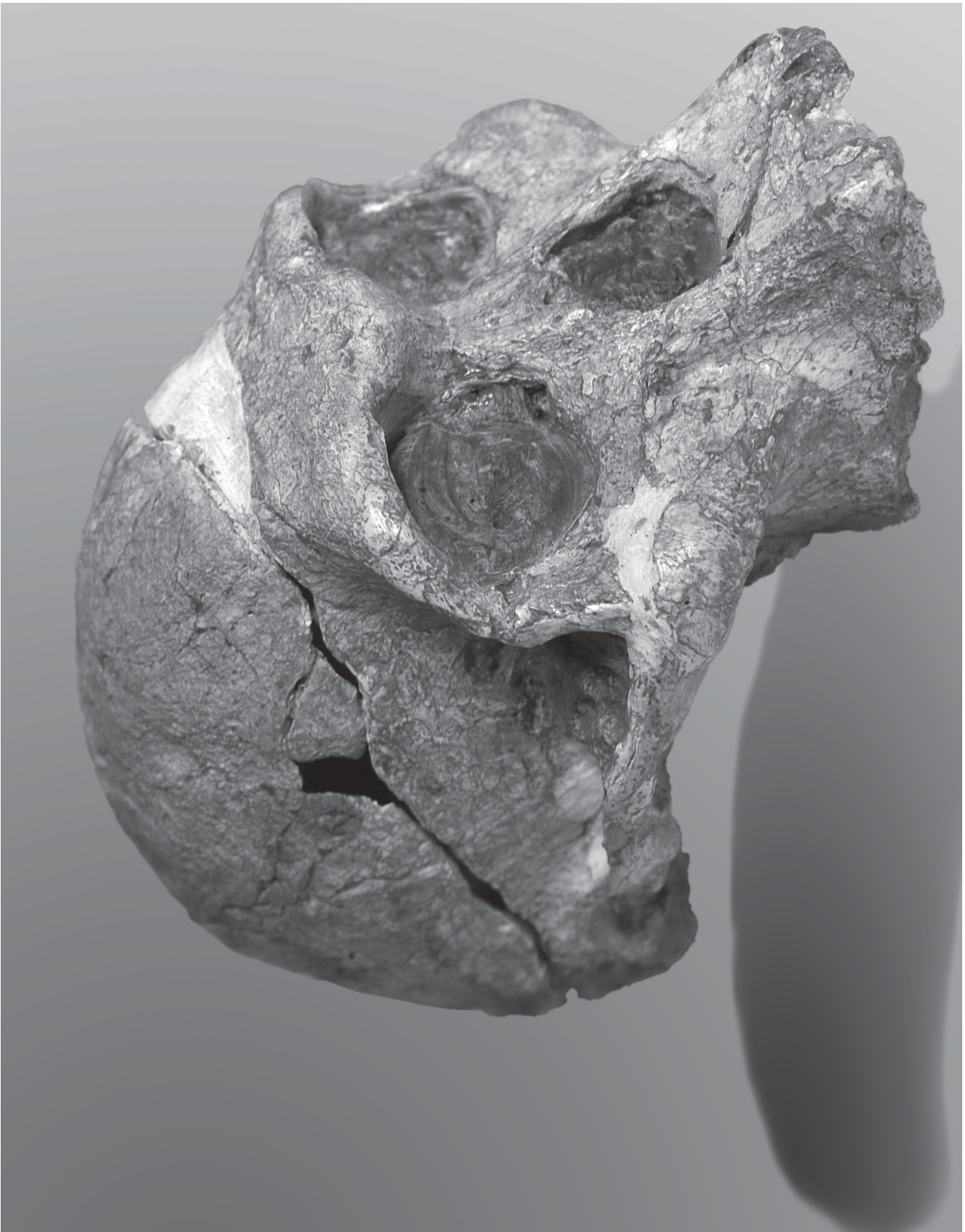
A LIVING DRAGONFLY FOSSIL



RESOURCE 37

https://upload.wikimedia.org/wikipedia/commons/2/2d/Mrs_Ples.jpg

MRS PLES



RESOURCE 38

https://upload.wikimedia.org/wikipedia/commons/a/a5/Coelacanth_specimen_NHM.jpg

A COELACANTH



RESOURCE 39

https://upload.wikimedia.org/wikipedia/commons/2/2f/AMNH_Apatosaurus.jpg

A SKELETON OF A DINOSAUR SIMILAR TO A BRONTOSAURUS



RESOURCE 40

http://www.maropeng.co.za/uploads/images/Dinaledi_Hand_and_Foot_cc_Peter_Schmid__William_Harcourt-Smith,_Wits_University.jpg

HOMO NALEDI'S HANDS AND FEET

