

HIRUNDO
ARCHAEOLOGY EXPLORERS



ACTIVITY HANDBOOK

WHAT IS ARCHAEOLOGY?



ARCHAEOLOGY IS THE STUDY OF THE PAST, AND **ARTIFACTS**, OBJECTS MADE AND USED BY PEOPLE IN THE PAST, ARE THE CLUES THAT HELP US TO RECONSTRUCT WHAT LIFE WAS LIKE LONG AGO. WITHOUT A TIME MACHINE, WE RELY ON OUR ABILITY TO DRAW COMPARISONS BETWEEN ANCIENT AND MODERN OBJECTS AND ON THE TRADITIONAL KNOWLEDGE PASSED DOWN THROUGH THE GENERATIONS IN LOCAL NATIVE COMMUNITIES TO UNDERSTAND HOW ARTIFACTS WERE USED. SOME CLUES ARE HIDDEN UNDER THE SOIL WAITING TO BE EXCAVATED AND ANALYZED, BUT OTHERS HAVE DISINTEGRATED OVER TIME .

ARCHAEOLOGISTS' TOOLS

CAN YOU FIND TOOLS THAT ARE USED FOR:

SCIENTIFIC TESTING

SAFETY

TAKING MEASUREMENTS

MAPPING

RECORDING INFORMATION

EXCAVATING



UNCOVERING THE PAST



ARCHAEOLOGISTS WILL **EXCAVATE**, OR SCIENTIFICALLY DIG, TO UNCOVER A SITE IN ORDER TO ANSWER A WIDE VARIETY OF RESEARCH QUESTIONS. THE LOCATION OF AN ARCHAEOLOGICAL SITE NEAR SPECIFIC FEATURES (ACCESS TO WATER, EASY TRANSPORTATION ROUTES, SPECIFIC PLANTS AND ANIMALS, PROTECTION FROM ENEMIES) WOULD TELL US ABOUT ACTIVITIES AND BEHAVIORS OF THE PEOPLE WHO WERE THERE. BY STUDYING THE **STRATIGRAPHY**, ORDER OF LAYERS OF SOIL AND BURIED ARTIFACTS UNDERGROUND, WE CAN SEE IF A PLACE WAS USED JUST ONCE, A FEW YEARS, OR EVEN MANY GENERATIONS. AS THEY DIG BELOW THE GROUND ARCHAEOLOGISTS REVEAL THE HISTORY OF A SITE IN REVERSE, EXPOSING THE NEWEST LAYERS FIRST GOING DEEPER INTO THE PAST AS THEY GET FARTHER BELOW GROUND .

HOW DO ARTIFACTS AND ANCIENT SITES END UP BURIED UNDER THE GROUND?



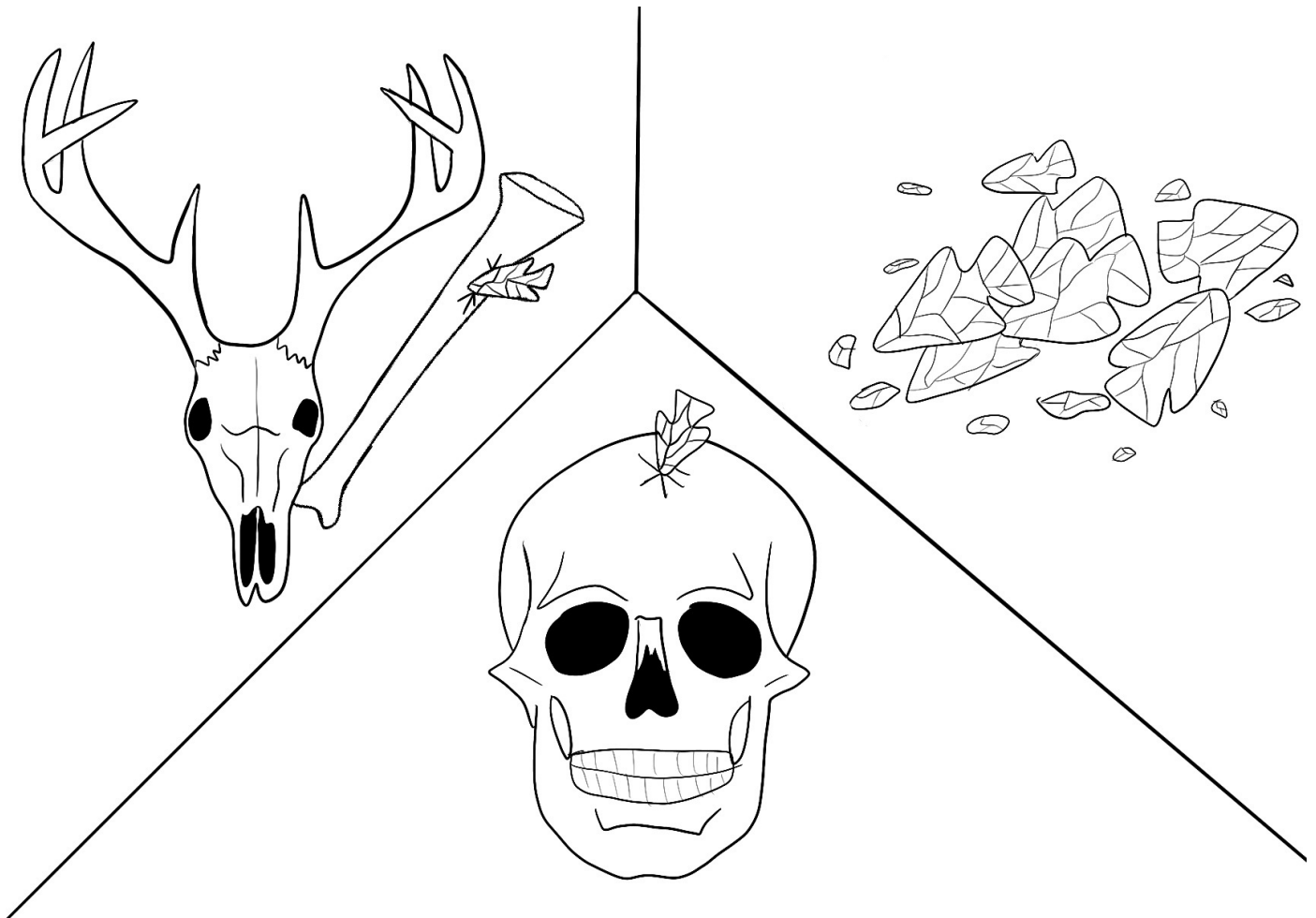
A VARIETY OF NATURAL FORCES CAUSE SOIL TO ACCUMULATE OVER TIME AND SITES THAT ONCE WERE ON THE SURFACE TO BECOME BURIED. FLOODS, RIVERS AND STREAMS, MOVE SOIL AND ROCKS TO NEW LOCATIONS DOWNSTREAM.

WIND MOVES FINE SAND, ROCKS SLOWLY TUMBLE DOWN STEEP MOUNTAINSIDES, AND VOLCANIC ERUPTIONS DUMP ASH AND LAVA ROCK. THE MOST COMMON FORCE TO COVER A SITE IS PLANT, ANIMAL, AND GARBAGE DECAY. OVER TIME, BUILDINGS COLLAPSE AND CRUMBLE, PLANTS GROW OVER THE AREA, AND FALLEN LEAVES, ABANDONED FOOD TRASH, AND ANIMALS THAT DIE, DECOMPOSE AND ADD TO THE SOIL GROWING OVER A SITE.

HOW DO ARTIFACTS HELP US UNDERSTAND THE PAST?

ARCHAEOLOGISTS RELY ON ARTIFACTS TO RECONSTRUCT THE PAST. AN ARTIFACT'S SHAPE AND PHYSICAL FEATURES CAN SHOW HOW IT WAS USED AND THE MATERIAL IT IS MADE FROM CAN SHOW WHERE THE OBJECT WAS CREATED?

THE **CONTEXT**, OR THE PLACE WHERE AN ARTIFACT IS FOUND AND THE RELATIONSHIP BETWEEN THAT ARTIFACT AND THE THINGS AROUND IT, CAN PROVIDE BETTER DETAIL ON THE STORY OF ITS USE.



BECAUSE OF CONTEXT, ONE ARTIFACT CAN TELL MANY DIFFERENT STORIES.
CAN YOU GUESS WHICH ACTIVITY EACH IMAGE REPRESENTS?

WARFARE

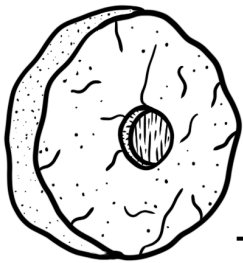
HUNTING

TOOL MAKING
+
STORAGE

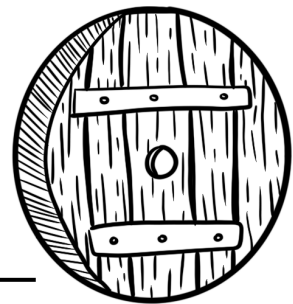
CAN YOU TELL HOW OLD AN ARTIFACT OR SITE IS?

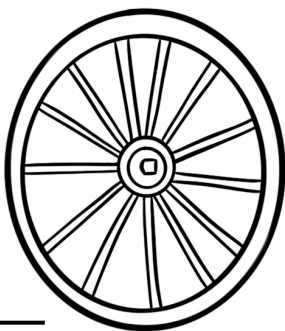
ARCHAEOLOGISTS USE A VARIETY OF TECHNIQUES TO TELL HOW OLD AN ARTIFACT OR SITE IS. LOOKING AT STYLISTIC CHANGES IN TECHNOLOGY OR TOOLS OVER TIME, AND COMPARING THE LOCATION OF ARTIFACTS WITHIN SOIL LAYERS CAN PROVIDE A **RELATIVE DATE** (IN OTHER WORDS 'THIS IS OLDER THAN THAT'). RADIO CARBON TESTING, A SCIENTIFIC ANALYSIS OF ORGANIC MATERIALS LIKE BONE OR CHARCOAL CAN PROVIDE AN **ABSOLUTE DATE** (IN OTHER WORDS '300 YEARS OLD'). ABSOLUTE DATES ARE MORE ACCURATE BUT A LOT LESS COMMON SINCE BONE AND CHARCOAL GENERALLY DO NOT PRESERVE AS WELL AS STONE, METAL, OR CERAMIC OBJECTS.

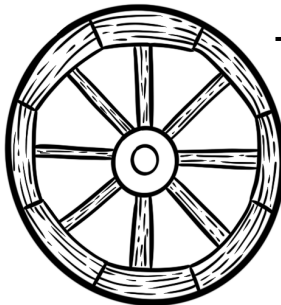
CAN YOU NUMBER THE WHEELS FROM OLDEST TO YOUNGEST?

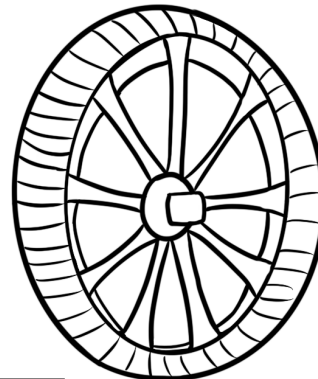






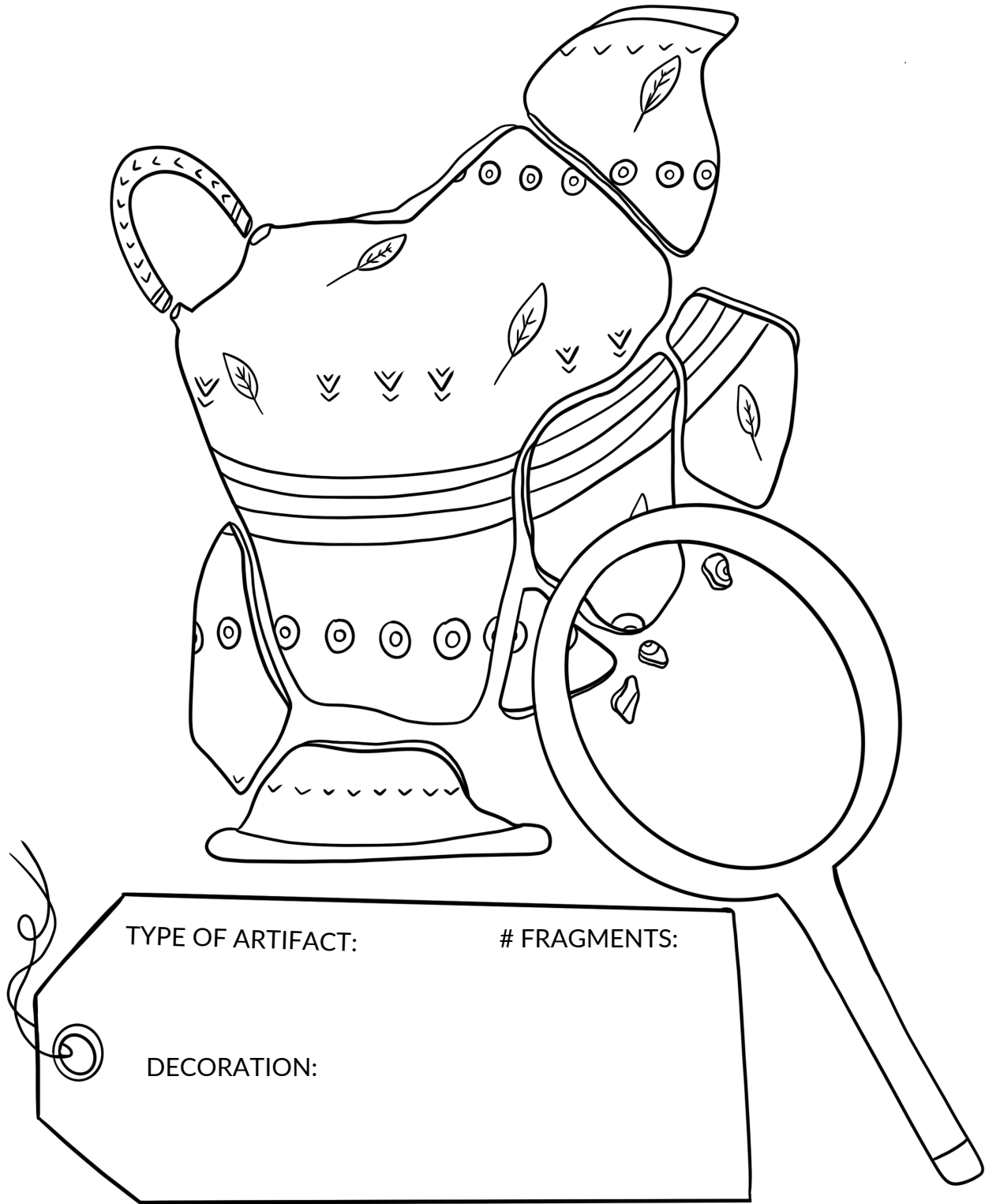






WHAT HAPPENS TO ARTIFACTS AFTER EXCAVATION?

ARTIFACTS ARE CLEANED AND STUDIED FOR ADDITIONAL INFORMATION (INCLUDING DECORATION, AGE, OR RESIDUES FROM USE). THEN THEY ARE **CATALOGUED** AND SAFELY STORED IN MUSEUMS, LIBRARIES, OR UNIVERSITIES. ARTIFACTS AND THE STORIES THEY REVEAL ARE OFTEN PUT ON DISPLAY SO THE PUBLIC CAN VISIT AND LEARN ABOUT THE PAST.



HOW DO I BECOME AN ARCHAEOLOGIST?

A GOOD ARCHAEOLOGIST IS CURIOUS, ASKS QUESTIONS, PAYS ATTENTION TO DETAILS, ENJOYS THE OUTDOORS, AND HAS A PASSION FOR HISTORY AND SCIENCE. TO LEARN MORE ABOUT THE PAST: VISIT HISTORIC SITES + MUSEUMS, READ MAGAZINES LIKE NATIONAL GEOGRAPHIC, ARCHAEOLOGY, AND SMITHSONIAN, AND WATCH DOCUMENTARIES ABOUT HISTORY + SCIENCE!



WHAT WOULD YOU LIKE TO KNOW ABOUT LIFE IN THE PAST?

ARCHAEOLOGY WORD HUNT

N T R Z U L W E Y R C G E N A
E A T A D O Y V T U S S H E Y
E R R O E E N I L R B L N I N
R E X C A V A T E R O O I O O
C C N E A V U C K L T W I O C
S H H J V R U E P S E T E O S
Y I V A E A M T P D A V M L M
W S L M R C N E J V G P O G N
E T Z Y R C R D R P A H T H O
B O N E V E O E M S V N M P S
L R A U C U S A S P E N A C D
L Y R O K B L M L I S C P Y Z
E M R D O Q G T C A F I T R A
H D N C K G H N N P D G J B C
S H V D Z A A P R O T E C T L

CAN YOU FIND THE FOLLOWING WORDS ?

**ANCIENT
ARTIFACT
BONE
CHARCOAL
COMPASS
CULTURE
DATA**

**DETECTIVE
EXCAVATE
HISTORY
MAP
OBSERVATION
PROTECT**

**RECORD
SCREEN
SHELL
SHOVEL
SOIL
STONE
TROWEL**