



## Digital Downloads

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**Full Size:** If you would like to have a full size print out, take the full size pages to your local print shop and they can print it for you.

**Tiled:** The tiled pages give you the option of printing the larger patterns at home. You print the tiled pages and then assemble them to make the larger patterns.



**Pattern PDF files** are typically laid out as follows: Cover (if applicable), instructions sheets (if applicable), pattern 1 – full sized, pattern 1 – tiled, pattern 2 – full sized, pattern 2 – tiled, pattern 3 – full sized, pattern 3 – tiled. ...Etc.

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**eBook PDF files** contain 1 (one) full eBook. All pages in the PDF are full sized. This means that you may have to take the PDF to a print shop for certain oversized books if your home printer cannot print the larger pages.

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**NOTE: Digital kit patterns do not include any kit parts that they may reference.**

Please note: When printing on a home printer, use the settings seen on the image to the right in the Page Handling area of the Adobe Reader print dialogue box. If your printer is cutting edges off, set "Page Scaling" to "Shrink to Printable Area". This will, however, decrease the size of the pattern a very small amount.



**NOTE: Some patterns may reference tools, and other items no longer available.**

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*Leathercraft Projects To-Go*

## Archaeology & Paleontology Designs On A Leather

# ARROWHEAD

*Plus A Look At “Why We Study  
Archaeology & Paleontology (Fossils)”*

**OBJECTIVE:** Students will learn about the theme while creating a useful and decorative leather project. Lesson includes history, science and new vocabulary words. Creativity, math and dexterity skills will be exercised to design, personalize, color and then assemble the project.

### MATERIALS LIST

All Supplies Needed To Complete  
12 Leather Arrowhead Projects:

- Pre-Punched Veg Split Suede Leather Parts
- Cords & Beads
- Cova Color® Acrylic Paints
- Brushes
- Sharpie Pens
- Stencils
- Design and Coloring Ideas
- Complete Instructions

### YOU WILL or MIGHT NEED:

- Pencils For Planning Designs
- Scissors For Cutting Cord
- Classroom Markers, Acrylic Paints & Brushes
- Plastic Palettes, Plates Or Wax Paper For Paints

### CLASSROOM TIME:

Minimum of 3 Sessions:

Design = 45 minutes

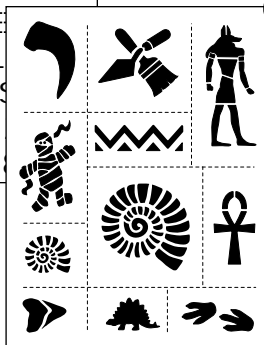
Color the Projects = 45 minutes

Assembly = 45 minutes



A	B	C	D	E	F	G	H	I	
J	K	L	M	N	O	P	Q		
R	S	T	U	V	W	X	Y	Z	
1	2	3	4	5	6	7	8	9	0

A	B	C	D	E
H	I	J	K	L
O	P	Q	R	S
V	W	X	Y	Z
3	4	5	6	7



## GETTING STARTED:

### SESSION 1 - Design:

- Have students plan their designs on paper templates before putting them on the leather.
- Copy the blank templates on page 5, cut apart on dotted lines and hand out along with pencils for planning designs.
- Cut stencils apart on dotted lines and hand out for planning designs.

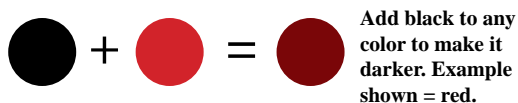
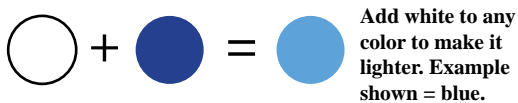
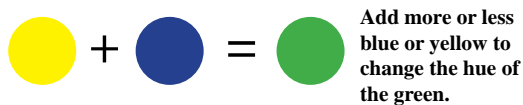
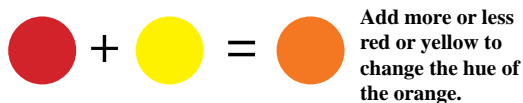
### SESSIONS 2 - Color:

- Hand out leather parts to each student.
- Share Sharpie Markers, paints & brushes. Use plastic palettes, plates or wax paper for mixing paints.

(SEE PAGE 3 FOR SESSION 3)

## MIXING COVA COLOR® ACRYLIC PAINTS

The primary colors (red, yellow & blue) have been supplied in this Theme Bucket. The secondary colors (orange, green & purple) can be created as shown:



*Now try mixing the secondary colors together to get even more colors.*

## What Are Archaeology & Paleontology?



**Archaeology by definition is the study of the life of ancient people by excavation of ancient cities, relics, artifacts, etc.** Why do we want to do this? By learning more about our ancestors, we learn about what worked and what didn't work back then. As a result, we can "learn from their mistakes" and improve our way of life and hopefully, not repeat their failures.

**Paleontology is the study of our long and interesting past by studying fossils (plants, animals, fungi, algae).** From microscopic to full size specimens are discovered and studied. Many people think paleontology is the study of fossils. In fact, paleontology is much more.

**Did You Know:** There is an Archaeological Tool kit? The major tools in the kit include:

- the trowel
- the brush
- the library card & Internet
- the backhoe
- the scanning electron microscope
- the tape recorder
- the camera

Throughout history, different methods of record keeping were used to document discoveries. First was the journal. Later came the tape recorder and camera. Now modern survey equipment, sonar, magnetometers, and radar devices along with digital cameras make these discoveries faster and easier to locate and record. Also, new techniques are being developed to better preserve, restore and understand the artifacts being found.

Archaeologists don't just gather information at dig sites. They also do a great deal of research by reading, surveying, laboratory analysis and oral history taken from individuals involved.

Continued . . .



**NOTE:** *When using acrylic paints on leather, be sure the project is completely dry before starting to assemble the project.*

## **GETTING STARTED** continued:

### **SESSION 3 - Assembly:**

- Copy the Instructions on page 6 and hand them out to each student along with the cord (cut in half) and beads. Scissors will be needed to trim the cord
- Practice before class and then demonstrate the assembly steps.

### **ABOUT THE LEATHER:**

*The leather used for this project is called veg-split leather cut from cowhide. Both sides are rough or suede. The grain side (smooth top side) of this particular cut of leather has been removed.*

*Veg-split leather can be decorated with designs by either painting or drawing with markers and pens. This project will be decorated using acrylic paints and colored markers.*

### **History Continued:**

There are three stages of archaeological study. First comes background research on the topic, second the actual fieldwork at the site. Most time consuming is the final laboratory analysis, interpretation and write-up. The analysis could go on for years before a final report is written.

With continued study and discoveries concerning our earth's past comes the knowledge and ways to help ensure our future. Over the years, human kind has damaged our earth, polluting the land, waters, sky and space. By studying our past, we discover what mistakes were made and possible solutions.

**Did You Know:** Archaeologists don't just work on land, but also in the ocean? One of the most famous oceanographer archaeologists was French scientist Jacques-Yves Cousteau and his famous research ship the Calypso. In 1943, Cousteau co-invented the aqua-lung (underwater breathing apparatus) which opened up and re-defined the world of underwater archaeology. Other well known oceanographer archaeologist include Peter Throckmorton, George Bass, Robert Ballard (finder of the Titanic) and many more.

The fields of Archaeology & Paleontology are vast and without boundaries. Discovering more about our past civilizations, plant and animals helps us understand our present and will help prepare us for a more successful future.

### **VOCABULARY:**

**Cowhide** - The hide (skin) from a mature bovine (cow).

**Flesh Side** - The rough (suede) underside of leather.

**Grain Side** - The hair side of the leather with the hair removed.

**Tanning** - The process using tannins to change a fresh animal hide into leather.

**Tannins** - Yellowish substance from oak bark and other plants used to tan leather.

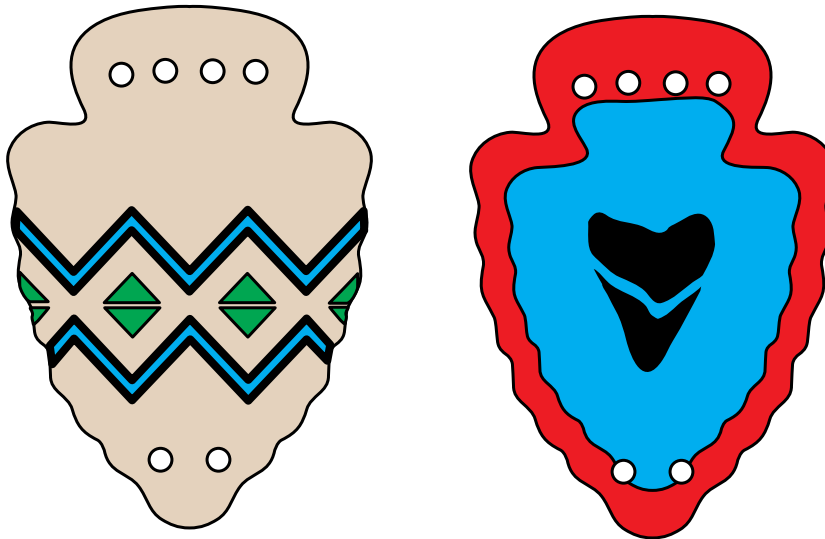
**Veg-Split** - Vegetable-Tanned leather can be split (layered) into two pieces: one with the grain (top hair side) and one with the rough surface on both sides. Veg-split is the rough surfaced layer.

**Excavate** - To unearth, make a hole or dig out.

**Digs** - The location of an archaeological excavation.

## CREATE DESIGNS USING STENCIL PATTERNS & YOUR OWN IDEAS

Here are some color & design ideas shown on the project parts. The leather can be left its natural color with just the designs in color or paint the backgrounds and designs different colors.

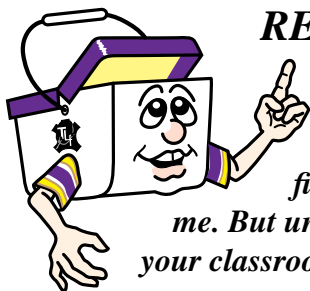


**COLORING HINT:** *To make bright or light colors stand out on a darker background, paint bright or light colors first. Then fill in background around them with a darker color. Or, put a wash over the area, let dry, then come back and paint the designs in white. Let white dry completely (few minutes), then add desired colors on top of the white.*

**Be Sure To Plan Designs On Paper Before Drawing  
Or Applying Color On The Leather**

### CLASSROOM EXPANSION IDEAS:

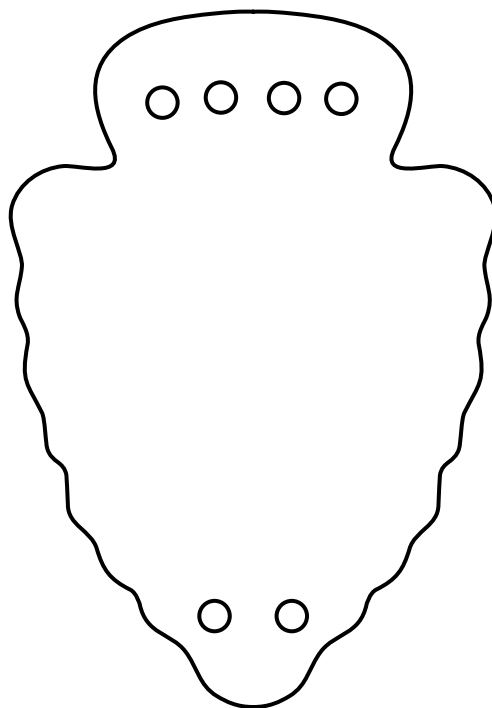
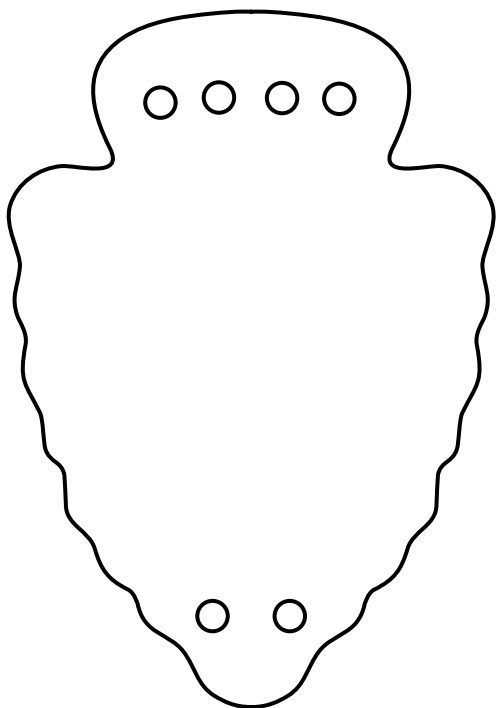
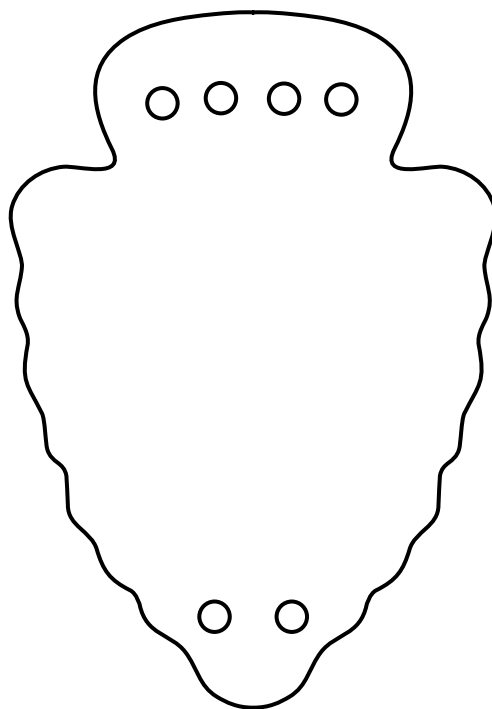
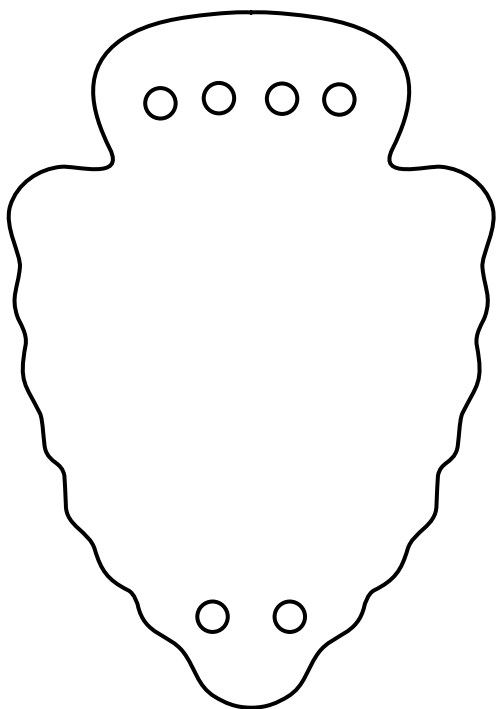
- ~ *Study the explorations and discoveries off Jacques-Yves Cousteau & other oceanographer archaeologists.*
- ~ *Study the discoveries found in Europe, the Mid East and Far East.*
- ~ *Study discoveries and current explorations going on in North and South America.*



### RECYCLE ME!

*“I am your Theme Bucket - be sure to recycle me! I would like to end up in your closet with many of my friends. I could store art supplies, extra leather project parts, or even help you organize your files. Create a new label for me so I can help you find what is stored in me. But until it’s time to recycle, I am happy to bring fun & learning into your classroom by offering you Projects To-Go from Tandy Leather Factory.”*

# TEMPLATE FOR PLANNING DESIGNS



## ASSEMBLY INSTRUCTIONS:

### Beaded Front Bottom Decoration:

- 1) Cut cord in half. Tie a knot in one end.
- 2) Slide two beads on cord and push up to knot. Insert plastic tip on other end of cord out through one of the front bottom holes and in through the next hole.
- 3) Pull the cord until the first beaded strand is at the desired length.
- 4) Slide two beads on other cord end. Tie knot at desired point to secure beads. Trim off excess cord.

### To Attach the Neck Cord:

- 1) Using remaining cord, slide on one long bead over the plastic tipped end of the cord.
- 2) Push plastic tip end of cord out top right hole on arrowhead; then in through second hole.
- 3) Pull cord until center of the cord is between center two holes at the top of the arrowhead.
- 4) Lace through next two holes (out and in) at top of arrowhead. Slide on other long bead.
- 5) Decide on the length of the necklace and tie a knot. Trim off excess cord.

**TIP:** To keep cut ends from unraveling, put a drop of classroom white glue on cut ends and let them dry completely.

### Optional Key Fob:

Trim neck cord to desired length, thread on a key, then tie both ends together in a knot.

### Optional Luggage Fob:

Trim neck cord to desired length. Tie both ends together in a knot. Slide knotted end through luggage handle. Then loop knotted end over the fob. Pull snug.

