EDUCATOR GUIDE

Painting the bones of your cat skull

Text by Aaron M Olsen, PhD and Callie H Crawford, PhD Images by Aaron M Olsen
Text edited by Callie H Crawford



Time to complete: 3 hrs

Age level: Grades 11-12 or College

Bloom's levels: 1 & 3

Description: In this module, your students will identify and "paint" (using markers) the bones of a model cat skull, gaining a better understanding of the bones' functional and developmental groupings, 3D forms, and physical relationships.

Materials needed:

- <u>FC01 Student Guide v1.0</u> OR <u>FC01 Coloring</u> <u>Kev v1.0</u>
- Cat Skull Coloring Kit v1.0
- 12 Sharpie® Permanent Fine-Point Markers, Assorted Colors

Systems:

Skeletal

Core concepts:

• Structure & function

Competencies:

- Observation
- Depiction of Anatomy

Module ID: FC01
Module version: 1.1

How to use and edit this module

This is an open-source active learning module created by <u>3D Anatomy Studios</u> and licensed under CC NC-BY-SA for use with the Cat Skull Coloring Kit.

Module Structure

This module has an **Educator Guide** and a **Student Guide**, divided into one or more sections, each with a number, a motivating question as its heading, and a learning objective. On the <u>online kit guide page for this module</u>, you'll also find a **Coloring Key** and a **Visual Coloring Guide**.

Educator Guide

The **Educator Guide** is intended for educators and contains a pedagogical schema for the module (see the following page) to help implement the module in a course (e.g., learning objectives, target Bloom's level and competencies, core concepts).

Student Guide

The **Student Guide** is intended for students to read as they complete the module's activities and can be read on a device or printed out.

Sharing and Editing

The CC NC-BY-SA license allows you to share and edit this module as long as you (1) do not sell the module or module derivatives ("NC"), (2) attribute the author(s) of all the content, including preserving text and graphic attributions ("BY"), and (3) share the module under the same license ("SA"). You can edit this module by copying the current Google Doc of this module (accessible at 3danatomystudios.com/guides/FC00) and editing that copy.

Purchasing Kits

To purchase your own kits, please visit <u>3danatomystudios.com/shop/cat-skull-coloring-kit</u>.

Pedagogical schema

Sections 1-3. What are the bones of the cat chondrocranium / dermatocranium / splanchnocranium?

Learning Identify (Bloom's Level 1 - Remember) the bones of the cat

objective chondrocranium / dermatocranium / splanchnocranium and **paint**

(Bloom's Level 3 - Apply) the bones on a 3D model of a cat skull.

Activity Color in the bones of a 3D model cat skull with marker

Self-assessment Compare colored model with reference images in the student guide

Systems Skeletal

Core concepts Structure & function

Competencies Observation Depiction of Anatomy