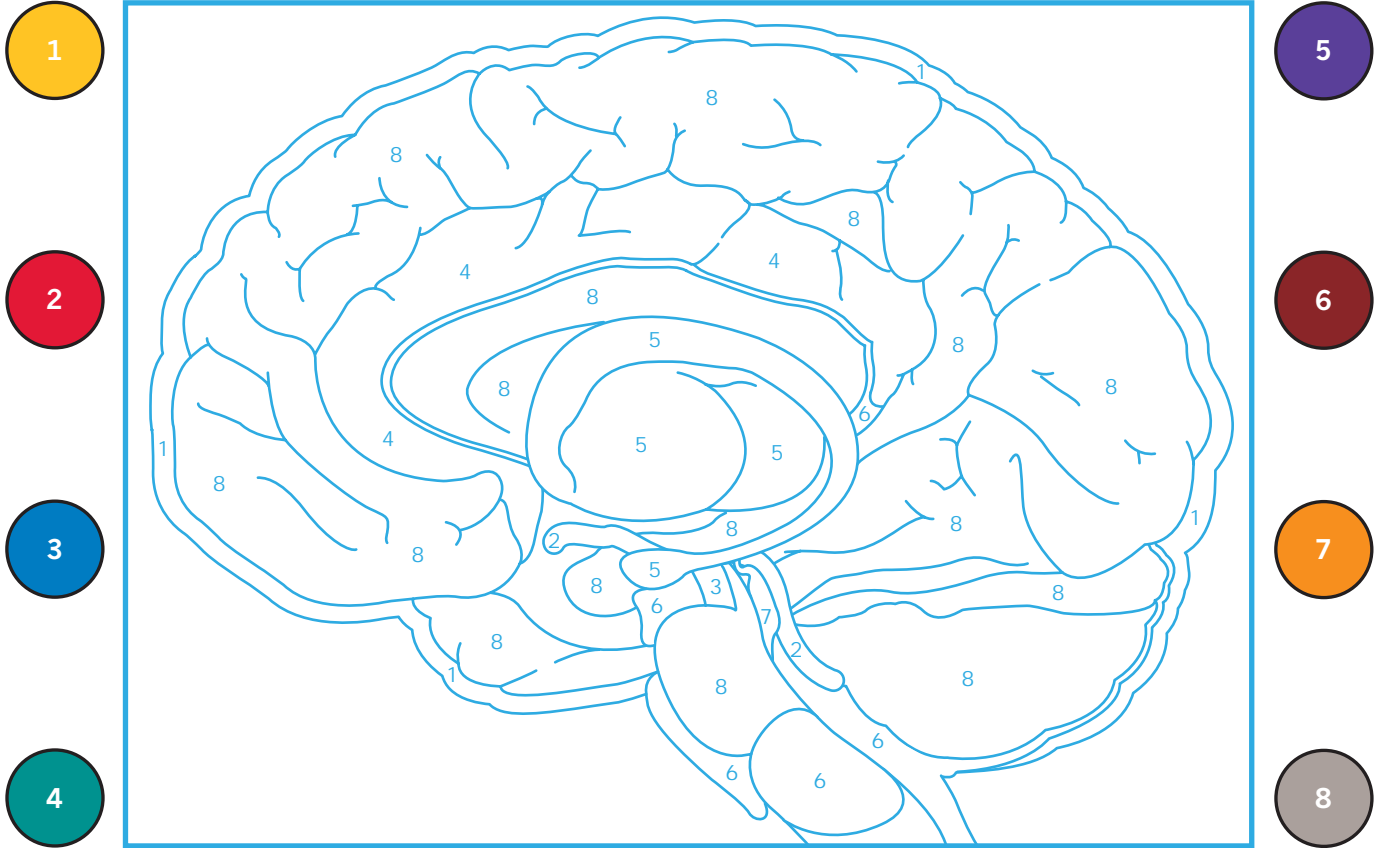




# PAINT BY NUMBERS Brain Anatomy

**By Kevin Kosbab** As a wrinkly gray blob, the brain is a pretty funny-looking organ. But inside your brain lurk bits and pieces of neuroanatomy with equally amusing names, whether absurd, rude-sounding, or just plain fun to say. So pick up a paint set, get the blood flowing through your circle of Willis, and focus your basal ganglia on the paint-by-numbers brain below.



### 1. Meninges

The meninges surround and protect the brain and its neighbors in the central nervous system. Meningitis, a bacterial, viral, or fungal inflammation of the meninges, doesn't roll off the tongue as nicely—and it ain't much fun to be infected with, either.

**Named for:** Greek for “membranes”

**No relation to:** Sam Mendes, the Menendez Brothers, ninjas

### 2. Circle of Willis

This ring of arteries keeps the blood flowing to your brain. Only about a third of the population has a circle with the exact textbook configuration, so don't be alarmed if your Willis has an odd kink in it.

**Named for:** Thomas Willis

**No relation to:** “Whatchoo talkin’ ’bout, Willis?”

### 3. Cerebral Peduncle

A region of the brain stem involved in motor control.

**Named for:** Latin *pedunculus* “small foot”

**No relation to:** pinochle, your uncle

### 4. Fornicate Gyrus

A cerebral ridge thought to be involved in muscle control. Sometimes called the limbic lobe.

**Named for:** The fornix, a bundle of brain fibers just under the fornicate gyrus.

**No relation to:** fornication, gyration

### 5. Basal Ganglia

A group of neural hubs linking the thalamus, brainstem, and cerebral cortex and involved in a range of brain functions.

**Named for:** Greek *ganglion* “swelling”

**No relation to:** basilicas, gangly teenagers

### 6. Subarachnoid Cisterns

Spaces between the arachnoid and pia mater layers of the meninges.

**Named for:** Latin *sub* “under” + arachnoid mater + Latin *cista* “box”

**No relation to:** spider toilets

### 7. Inferior Colliculus

A lump of the midbrain involved in hearing. Bonus odd name: the corpora quadrigemina is made up of the inferior and superior colliculi.

**Named for:** Latin for “little hill”

**No relation to:** Caligula, calculus, collagen

### 8. Paint the boring brain bits gray.

#### Extra Credit

Hey, I can see your weenis! Don't worry, it's just skin on your elbow—or so the popular legend goes. The brain doesn't have a monopoly on goofy-sounding names, so for extra credit, look these body parts up and sketch them on the back of the sheet. Keep your canal of Schlemm on your own paper!

**Orbicularis Oris:** When you pucker up, you're giving this “kissing muscle” a workout. Bet you can't say the name five times fast without it sounding like a dinosaur.

**Canal of Schlemm:** The canal of Schlemm sends eyeball fluid from in front of your iris to your bloodstream. A clogged canal can cause glaucoma.

**Purkinje Fibers:** These fibers in your heart's walls carry the electrical messages that keep your heart beating.

**Sternocleidomastoid:** Rotate your head a few times to relieve some stress. You've just exercised your neck's sternocleidomastoid muscles.

**Trapezius:** Have you been shrugging in indifference while reading this worksheet? Of course not! But if you had, you'd have worked the trapezius muscles in your back.

**Palatine Uvula:** The dangly bit at the back of your throat. It may help direct airflow in speech. Some scientists think it may have helped our evolutionary ancestors drink while bent over at the water hole.