

>> Okay. So we're going to pick up. We looked at all of the cranial bones last time. And now we're going to be looking at, starting today with facial bones. And the first facial bone that we're seeing on our list is called the mandible. And so, the mandible is the bone of the jaw, single bone, mandible. We're loving it here. Loving how it's looking today, this mandible. Good morning class. So there it is the mandible. We'll pull him aside and grab a disarticulate mandible. Like so. So if we receive the mandible disarticulated. Let me zoom in and get a little bit better resolution for you, I hope. Kind of blurry. I don't like that. Let's do it quick. Everything ruined. Okay, that looks better. Okay. So what we're seeing with the mandible is the bone of the jaw, certainly. And we have four structures we need to know. The first structures are called the mental foramen. This is a little helpful tip on mental, the word mental is not what you would think. The word mental here means chin. And so, here are the mental foramen on the chin of the mandible. I'm trying to change the light for a little bit. Chin, chin, mental foramen. So we're following along in our atlas or our textbook to identify or the practice anatomy lab this morning. Mandibular foramen are going to be internal. So we're going to turn like so, and we're going to see these mandibular foramen on the inside, the internal aspect of the mandible. And look what it says there on the right-hand side. This should make sense. Dental vessels nerves. So don't you think that the last time you were at the dentist, make sure you go twice a year, the last time you were at the dentist and you had that little worked on, and what did they do? They gave you an injection right in this area. Oh, you're like, "Oh no!" Why? Because they are numbing these dental nerves, and then you were drooling all the rest of the afternoon. Yeah. That was what it [inaudible] foramen. And then we have two processes and the coronoid process, remember we're looking at with these words are on page 29. The handout I gave you last week that has all of the definitions for each week's terms to help you find what you're looking for, right? So a process is kind of a general term for any sort of extension off of the bone. And it could either form an articulation or form muscular attachment. So the two processes use two different jobs here, coronoid. The word coronoid means bird's beak-like. It looks like a bird's beak. And so, this projection, that's kind of more sharply-pointed and it's more anterior, is the coronoid process. And the round condylar has the word condyle in it. And a condyle, we said was a smooth round surface, and here is more of a smooth round process. It is posterior. This is the condylar process. It also, by the way, in your atlas, is called the mandibular condyle and that's okay. Either one. So, mandibular condyle because it's not in the mandible and it's shaped like a condyle, or condylar process. Either of those are correct. We're remembering that something is slightly differently worded in the atlas, that's fine too. And it's the condylar process or the mandibular condyle that articulates on the [inaudible] side. You've seen this already. I mean, here it is, with remember, here's the temporal bone. And we said that this little indentation is called the mandibular fossa. And it's where the mandible, in particular the condylar process of the mandible or the mandibular condyle, articulates with the temporal bone. Put it all together this morning, put it all together. That's your mandible. The next bone on the list is called the – oh,

next [inaudible] zygomatic. I'm just going to look and see, okay, zygomatic. We've seen zygomatic already as well. So here's the mandible. The zygomatic is the bone of the cheek. And we looked at the zygomatic, again, we looked at the temporal bone because this extension is called zygomatic process. And it articulates with the zygomatic bone, bone of the cheek. So here's what it looks like to disarticulate it. Here's a zygomatic bone. Let me focus on it a bit more for you. This is the zygomatic bone, bone of the cheek. And so, there aren't any structures listed under it, thank goodness. But it does have a very specific shape, and it does articulate with three other bones. So how are we going to figure out what we're looking at here? So the first thing we see on a disarticulated zygomatic is this smooth, round edge that makes up part of the orbit. Let me put it down, I'm going to bring the skull back, right? Here's the skull, here's the zygomatic, here's the orbit, that smooth, round edge. I'm going to put the zygomatic on top of it like we've done before, right? It goes right here, just like so. Just like so. So, that smooth round edge is the forming the orbit. Put this aside for a second. So, I know that this is facing the anterior, right? My orbits are on the front of my face. Then, with that in mind, this is anterior., this is posterior. So this extension is where it starts to join with the temporal bone, with the zygomatic process of the temporal bone, right? Put it back again. There it is. There it is. There's the zygomatic process, here's the zygomatic bone. It's on the opposite side of the orbit. Boom. Love it. What else am I seeing? If I put it back in this position, I can see there's another place where it's meeting another bone. What other bones? I mean, here are the frontal bone. Does that make sense? Yes. So here's the part that makes up the orbit. At the top of the orbit would be the frontal. This point is called apex where a structure forms of V. It's called apex. The apex of his bone does not articulate with anything and it's inferior. Okay. Get that out of the way. Okay, there it is. And then lastly, if I look at this entire anterior edge, inferior-anterior edge, inferior to the orbit, where is it articulating? This is called the maxilla, the bone of the upper lip, which we'll look at next. So, if I am given this bone, I should be able to not just name it, but I should be able to say, based on these structures, the orbit, the apex inferior, orbit anterior, I should be looking at this and the bones that it articulates with, frontal, maxilla, temporal. Love it. This by the way, right, is a right, this is a right, just a flat. [inaudible] bone. Next on our list, we're turning to page, palatine. The word palatine sounds like palate, like the palate, the roof of your mouth. I'm going to show you the palate on the skull. Anterior, I'm going in, right? Here's the mouth. Here's the oral cavity. I'm going to go inferior. Here are the teeth. This is the palate, palate. And part of the palate is formed by the maxilla bone, which we're going to look at next. The other part of the hard palate, which is right here, is called the palatine bone. So it's located here. I want you to note right now these two open curves on the palate. That's going to help us with the palatine. And just note, we'll come back to it. This is what a palatine bone looks like. Let me zoom in for you. This is what a palatine bone looks like, disarticulated, disarticulated, palatine. So, if we were in lab, you'd have to know if this is a right or left. I'm not going to ask you that. Oh my goodness, I can barely see it the way it is. Let

me just do this and see if I can just put it on table and not hold it because it's so small, and point out a couple things for you. So the palatine bone is often described as being, you decide, L-shaped or J-shaped, whatever you think. I'm good either way. But the important thing I want you to see is, look, is this inferior, this is the palate edge. That flat surface is the palate. I'm going to turn it again, and if I look at it this way, so this flat surface is the palate and here's that curve we were looking at just a moment ago. There's the curve. This, nothing you have to remember, I just want you to see something, this is a left palatine. The right palatine would be articulating with it here. Remember that the curve is posterior. So this is anterior. And this is where it's articulating with the maxilla, the other part of the palate. So my teeth are up here. Let me show that to you in a second. This is the palatine bone. Let me show it to you now. Let's go back. Let's go back to our skull. Anterior, up in here, this is the palate. This is the maxilla bone. Let me turn it upside-down, right? This is anterior. This is the anterior. This is the palate, this is the maxilla bone in here that's curved, we talked about a moment ago with the palatine bone. So, let's grab it – so you can see it. Look at this. That's been in here. There's the curve. Palatine is the posterior portion of the hard palate. Palatine. Next, maxilla. We've mentioned it a couple times already. Let's look at it. So you can access the other bones of the upper lip. This is maxilla. Teeth attached to the maxilla. Here's what I disarticulated. There are [inaudible] maxilla looks like. So, maxilla. This to this. Well, sorry. That's frightening. Okay, here we go. Maxilla, here's the maxilla. So there's no right or left on the maxilla. And here's what we need to know about it. Under maxilla, we have, here's our final sinus. We finally got to the fourth sinus. Concealed cavity. Looking internally, this huge space is the maxilla sinus, huge space, maxilla sinus. Then we have the infraorbital foramen. I can figure that out. This edge is the inferior edge of the orbit, [inaudible] Infra means under, orbital means the orbit, a foramen is a hole. Infraorbital foramen, under the orbit hole. Inferior orbital fissure, let's make a note. It's listed on this bone, but I can only see it when this bone articulates with this sphenoid bone. I can only see the inferior orbital fissure when the maxilla articulates with the sphenoid. So I'm not going to see it on this phone anywhere, right? We just started with a juggler foramen where we only saw that when two bones are articulated. Same thing here. So what am I going to do? I'm going to look at an articulated skull. Then I look into the orbit, because that's where that inferior orbital fissure is. Here's the maxilla. This is the greater front wing of the sphenoid. And this crack, this slit, is the inferior orbital fissure, inferior orbital fissure. We know this one. What's that one? We already talked about that one. Superior orbital fissure and inferior orbital fissure, that lower crack slit in the orbit. You can only see it when the maxilla is articulating with the sphenoid bone. There it is. There it is, the maxilla. This is a right maxilla. This is how it would sit [inaudible] an anatomical position, right? Here are the teeth. The teeth are at the front. This is the right maxilla, just an FYI. Next. Okay, is next last few bones, teeny tiny bones. You would just need to know them by their shape. So the first is called nasal. The nasal bone are these two little teeny bones that form the bridge of the nose, nasal

bones. Before I show to you this – well, let me just – okay, here, nasal bones. So the nasal bones, if you were to see them again, we're going to have to say that they are rectangular shape bones. You will just have to know them by their shape. So this kind of this rectangle bone is the nasal bone. That's all you have to say about it, nasal bone. There it is. Next bone is called inferior nasal concha. We've seen these before in the skull. This is an inferior nasal concha. So here's what it looks like on the superficial surface. Here's what it looks like, has this little clip on its posterior surface. Like so. And here's, so you just have to know that that's an inferior nasal concha by its shape. Here's where it is in this fore. We've seen it already. We look inside the nasal cavity. What we've already talked about is the perpendicular plane of the ethmoid, the superior nasal – or the middle excuse me, nasal concha, middle nasal concha. And these are the inferior nasal concha. So these are this bone sticking out the side of the nasal cavity. This one would sit – let me do this so you can actually see something besides my fingers. This one would sit on this side, like so. I'm going to go grab something real quick, another example that will help. I'll be right back. All right. Here, some of the bones we've just been talking about. Here's the maxilla. Here's the nasal bone. Here's the palatine bone. And here's the inferior nasal concha bone. So this is a nice view of all those bones so far. We have one more that we'll be looking at as well. Sorry, I don't have my chat. I cannot see my chat, so if you have a question, please speak up. Oh, that's someone. No? You're good? Okay. All righty. Again, maxilla, nasal, palatine, inferior nasal concha. There's that maxillary sinus. How does this sit here in my teeth? It would sit – sorry, let me try and grab this real quick. Oh, you're just expressing how much excitement you have over the bones? I see. Excellent. [laughs] Excellent. All right. This is how it sits in your face. Teeth are here. Anterior, posterior. So cool. A couple more. Vomer. We just talked about the bone ridge. Well, this is what the vomer looks like. The vomer, the word vomer means plough, like a farmer's plough, right where he – ploughing fields, this is vomer. So the vomer, always seen as flat. The vomer, let me move this aside, is the bone also in the nasal cavity. Here's the perpendicular plate of ethmoid. The vomer is articulating with it from the inferior. So this is the vomer here. So it, along with the perpendicular plate, helps form the nasal septum, vomer. So same thing, the vomer would be sitting in here. Let me show it to you and grab another. This is the anterior of the vomer. So this is that point we're seeing right here, anterior vomer. Let me grab something else and let you see. You're okay? Now, I was going to show you something cool, but something took the bones, I'll show you two of these bones. So, here's the other thing that you see with the vomer. The vomer articulates with the sphenoid bone, like so. So this is where the vomer would sit underneath, inferior to the sphenoid bone. This could be a little view of that. Next. Almost finished with these. Lacrimal. Lacrimal means tears. And so, the lacrimal bone, I'm going to show it to you on this articulated skull that has some colorized version. Here's the maxilla and here – and this is the ethmoid. This is lacrimal. So now I'm going to show it to you on this skull because the lacrimal bone, which is here, when it articulates with the maxilla, and ethmoid, forms this passageway. And on your list, it says

nasal lacrimal duct, we're just going to say lacrimal duct. And that's the tear duct, right? So that is located here. If we will see this one is articulated, as we can see the shape, it's kind of an oval shape. That's the lacrimal bone. That's the bone that we're saying, all right. It's the bone that we're seeing, right? Let's put it in like we've done this with others. It'd be sitting in here. And last facial bone is called hyoid bone. Now, here's what [inaudible] the hyoid bone. The hyoid is the only bone we talked about in lecture today. We said it's associated with the skull, but it's not actually part of the skull. The hyoid bone is this U-shaped bone, that's sits in this position on the skull. It's sits right under here. And it's right under the structure called the larynx. And it's the only bone in the body that does not articulate with any other bones. The purpose of the hyoid bone is muscle attachment. So this bone is located in this position, so that muscles of the neck and arm can attach to it. Hyoid bone. Love it. Love the hyoid bone. Those are my bones, all of my bones of the skull. Thank you, Amber, for answering that question. All right. We're going to move on and to the vertebral column. And here's what I want you to see. Let's start with your lab book. And by the way, I do want you to know that all of these diagrams that I'm assuming you're filling in, I'm seeing you're filling in, I would be colorizing them. I would be coloring the bones different colors so that I can see the articulations, right? So all these diagrams, I will be posting the correct answers for them at a somewhat later date after we've been through them, and you've had a chance to do that. Because as always, I want you to attempt it first. And then I will post and then you can make corrections. But what I am not expecting of you is that you just wait for them and fill them in. That doesn't help you. That doesn't assist you. You need to see how you're feeling about the structures, and if you're able, so you want to study them a bit, then attempt these. And at some point a bit later, I will post the correct answers for you. Okay. Good, good, good, good, good. All right. I just wanted you to see that. Now, what are we looking at? The vertebral column? We're still in the axial skeleton. We said this today, we're doing – there are seven what we call cervical vertebrae including two that we need to know by name, cervical and the atlas and cervical to the axis. There are 12 thoracic vertebrae, five lumbar, one sacrum made of fused vertebrae, and one coccyx, usually for anywhere from three to five depending on your genetic makeup. And so, these are the groupings from, it's important, proximal to distal, proximal to distal. And then when we turn the page, we see this very long list of structures that we need to find. And so, here is what I'm going to say about these, almost all of the structures, almost, we'll talk about the exceptions, can be found on any type of vertebra, almost. You can find all these, you know, atlas, axis or specific name, vertebra, so we're going to leave that for now. But all of these structures, all these bulleted structures, for the most part, with a couple of exceptions, can be found on any vertebral type. So, you're going to find them on a cervical or thoracic or lumbar. The exceptions are going to be structures on each of those three that are only found on one of those three. And those are the structures that are going to help us know if we're looking at a cervical or a forensic or a lumbar. So I'll explain that better as we go. So we're going to wait to till

we get to atlas and axis, which just means, these sort of two specific names of cervical-1 and cervical-2. So we're going to start with V structures. But before we do, if you have your highlighter handy, I want you to highlight a couple of things just that it draws your eye. And if you don't, do it later. In parentheses on two of the structures, this tells me that this structure right here is only going to be found on cervical vertebrae. So I want to highlight cervical only. And down here, this group of parentheses is telling me that this structure is only going to be found on thoracic vertebrae. And that's how I'm going to know if it's a thoracic vertebra. So I want you to highlight cervical only, thoracic only, so that when we get to those, we'll remember that that's how we're going to tell if it's a cervical vertebra, or a thoracic vertebra. So with that in mind, let's look at, I'm going to use, and you can find them on all of them, almost. But I'm going to use the thoracic vertebra, because it is a bit easier to see all of the structures. And then when we get to a structure that's on the cervical only, I'll show that to you. So here is a thoracic vertebra. We'll talk about in a second. But the structures I'm going to point out to you again, with the exception of this structure that's only found on the thoracic vertebra, can be found on any that we look at. So let's start with the body. The body of the vertebra is this large, rounded, thick pad. This is the body of any vertebra, body. And the body is in anterior. It's on the anterior of the entire body, the human body. This is a body. Transverse in the transverse plane processes, right, these two extensions that are bilateral to the body and they're in the transverse plane, right? This is the transverse plane. So these are the transverse processes bilateral to the body. Next, underneath transverse process, we see transverse foramen and this is the one that says cervical only. So I'm going to put it aside and I'm going to get a cervical vertebra, right? But we've seen so far body and transverse processes, but now the thing that's going to tell me that this is a cervical vertebra are these holes in the transverse processes called transverse foramen. The body is facing anteriorly. I'm going to show you an entire vertebral column in just a couple minutes to help with that too, Amber. So body is facing anterior, right, the front of my human body, transverse processes. And on cervical vertebrae only, I have these holes called transverse foramen. So as soon as I see those, I noticed the cervical vertebra. Let's look at this thoracic. No holes in the transverse processes, cervical vertebra. Moving on with our list. Spinous process. So the spinous process is, I want you to reach back, run your thumb along the ridge of your back, what you would call your spine. This is a spinous process. It's posterior you're on the bone right I can run my finger along my spinous processes. So it faces posterior, spinous process. Next, spinous pedicles. The pedicles are the areas of bone – turn it sideways, it's better to see it. The pedicles are the areas of bone that attach the body to the transverse process. So, this would be pedicle. This area of bone that attaches the body to transverse process is called the pedicle. Lamina attach the transverse process to the spinous process. This is lamina. So just reach on the bone, both the pedicle and lamina are attachment areas to attach one structure to another. Pedicle, again, attaches body to transverse process, we're seeing right here. Lamina attaches transverse process to spinous process and we're seeing it right here, lamina. Vertebral

foramen. This is a big hole that the, well, look to the right, that the spinal cord is passing through, vertebral foramen. Intervertebral notch and foramen. Let's break that down. And then we'll show what it looks like. Inter always means in between. Inter means in between. So in between the vertebrae. Oh, I just found there's a typo there, sorry about that. Intervertebral, in between the vertebrae notch and foramen. So intervertebral notch is inferior. And it's this large indentation that are seen just inferior to the pedicle. So here's the pedicle. Here's the intervertebral notch. And it's important to write that it's inferior, inferior. Intervertebral notch. Then, again, it's only foramen when a vertebra is articulating with another vertebra. Let me go get the articulated vertebral column for you. Okay. You can see the whole thing. Now that's to the whole thing. This is the articulated vertebral column with all of the vertebrae, the way I see [inaudible] So, [inaudible] proximal to distal, sacrum and coccyx most distal. And an intervertebral foramen is formed when two vertebrae are articulated. And now this notch becomes a foramen. So if I pull it apart, it's an arch. When I articulate it, it forms a hole, a foramen. Intern, in between, vertebral notch, when they're articulated, foramen. So cool. This is human bone, by the way. I wish you were here. Intervertebral bone, notch and foramen. And back to Amber's earlier question. So if I'm looking at the whole vertebral column, like so, remember the positioning it is, these are the spine, spinous processes. They're posterior. These are the bodies, they're anterior on the skeleton. Next on our list, superior articular processes and facets. So again, if I remember that the intervertebral notch is inferior, then everything up here is superior. If the notch is inferior, the opposite side is superior. And I had two processes, that is extensions, away from the bone. So these are the superior. And you can eliminate the word articular to make life easy. These are the superior processes. And if we turn it posterior, I don't know, if it's posterior. Here's the spinous process. The smooth flat pad that's formed on the process is the superior facet. So the word facet, first time we've seen it, means smooth flat pad, and we can see the smooth flat nature there. So, the extension is called the process. The flat pad is the facet. We have a superior so we also have an inferior process and facet. Again, [inaudible] Here's that intervertebral notch. Not quite as prominent, but posterior to the intervertebral notch, inferior processes, here in here, inferior processes. And now on the anterior aspect, smooth flat pad, inferior facet. I know that's anterior, it's pointing toward the body. What are those there for? Those are the articulating surfaces where one vertebra meets the next. So here's the inferior articular facet on one vertebra articulating with the superior articular facet on the distal vertebra. Cool, love it. There they are. Costal, remember what we said earlier, the word costal always always means rib. And only thoracic vertebrae articulate with ribs. Only thoracic vertebrae articulate with the ribs. And so, only thoracic vertebrae are going to have costal facets. And a costal facet, wait, I don't like the light here, sorry. Costal, I'll just keep moving. Costal facets, here's that smooth, flat pad, are only going to be found on thoracic vertebrae bilateral to the body. So here's the body. Here's one costal facet on one side. Here's the other costal - oh, look, that must have been in there. It must have been a test question. Here's a

costal facet on the other side. That's where rib articulates. That's where a rib articulates. I'm going to show you that in just a second how rib actually sits on the thoracic vertebra. And then lastly, we're going to look at atlas and axis in particular. So again, these are cervical-1, and cervical-2. Those are the first two cervical vertebrae. So they look a little different than the other vertebrae in general. So here are the things that we want to note that will help us with it. The atlas, cervical-1 does not have most of the structures we just make. It does not have a body, it doesn't have lamina, it doesn't have pedicles, it doesn't have a spinous process per se. What does it have? This open kind of space. And it has transverse processes, because it also does have the transverse foramen which would identify it for us. It has superior articular facets and inferior articular facets because it does have to articulate with the bone above it and the vertebra below it. So the bottom vertebra that we talked about before, let me get it out and remind you that when we're looking at this particular bone, the atlas, let me just lift it so you can see this now. Here's my atlas. This is anterior, this is posterior. This would be articulating with the da da da da, occipital bone. This is articulating with this occipital condyle-like shape, smooth, round, right? Smooth, round, convex, into smooth, round concave facets. [humming] Love it. That's how they articulate. That's how they articulate. Beautiful. The difference I want you to see this, between the superior facets and the inferior facets are the shape. The superior facets which articulate with the occipital bone, again, are concave, right? They have a curve. The inferior facets are smooth and flat like most facets are. And that's because these are the inferior facets that are articulated with the superior facets of the next vertebra, which is the axis. So if the shape of the superior facets, smooth and flat, smooth and flat, perfect fit. Look at that. Love it. Love it. And the identifying feature on the axis is unique. The only vertebra that has this process that sticks up like this, called the odontoid process or the dens. A odontoid means tooth-like, looks like a tooth. And here's how these two dens articulate. And it allows for this movement called rotation that we did earlier. And the joint is called a pivot joint, we'll revisit that when we talk about articulations. That was an axis, I need to know those by name, in particular. Love it. We're going to do the last two bones of the axial skeleton and we'll take a break. Ribs. Here's a rib. It's like that, your rib. Here's your rib. Ribs are all pretty alike. Some are shorter than others, with the exception of the first rib. So this is the first rib. It's so different from the other ribs. The first rib is articulating with the manubrium of the sternum. So it's a little bit different, looks a bit flatter, this first rib. So I'd like you to know that this in particular is the first rib when asked you the numbers of any other ribs, of which they're 12 pair, that you should know this is rib number one. First is the other ribs, and move it out of our way. And here's what we have to know on a rib. Let me give you a different view here. So a rib has what's called a head, neck and tubercle. Let's write this down. The head, neck and tubercle are all on the posterior of the bone, posterior where the rib is going to meet a thoracic vertebra. Head, neck and tubercle are posterior and it's where a rib is going to meet a thoracic vertebra. So the flat is the head - let me get that [inaudible] a little bit more, sorry.

This flat edge is the head. This constricted region here is the neck. And this little round bump, that's the definition of tubercle, is the tubercle. Head, neck tubercle. Head, neck, tubercle. And the head and the tubercle articulate with the thoracic vertebra. The head attaches at the costal facet. And the tubercle attaches at the transverse process, which also has a costal facet, by the way, like so. Like so. If you're in lab, I have the old rib and feel that one edge is round, the other edge is sharp. And the sharp edge of the rib is inferior. So they put the sharp edge inferior, head, neck, tubercle posterior. We could put it on the correct side. This is a right rib, just an FYI. Rib, well, [inaudible] the sternum. So the sternum – or actually not I was going to [inaudible] the sacrum is about just real quick. So here's the sternum with costal cartilages attached. This would be the costal cartilage for the first rib, rib number one would attach here. It would look like this. This is where it would attach. And the other parts, again all the ribs. So right, now we're looking at the rib, head, neck, tubercle are posterior. This flat edge is what would be articulating with a costal cartilage. Sternum, three parts, proximal to distal, manubrium, body, xiphoid. We've got the costal cartilages, manubrium, body, xiphoid. What's attaching here? First rib. What's attaching here? The clavicle, which we'll look at next time. Yes, Amber, it can. Let me show the sacrum and I'll come back to your question. We don't want to skip the sacrum. Looked at the vertebrae disarticulated. This is the sacrum. Here's the posterior, here are the spines. This is anterior. And I can see some structures on the first part of the sacrum, right? This is still a body right here, and that's still a body. Again, these are still spinous processes. This is still a superior articular process and facet on the sacrum. Fifth lumbar vertebra would articulate here, the lowest lumbar vertebra. If I'm looking at a lumbar vertebra, how do I know a lumbar from the others? It doesn't have transverse processes and – excuse me, it doesn't have transverse foramen in the transverse processes and it doesn't have the costal facet. Lumbar. Inferior articular processes in facets. Again, here's my intervertebral notch, it's inferior. That's going to help me identify, here the superior, this is inferior. So these little extensions here are inferior articular processes. And when I move anteriorly, I see the facet, inferior facet. So locate the intervertebral notch first, then you'll see an inferior facet, which is attached to an inferior process. Better, Amber? Okay. All right, everyone. Boom, boom, bam! Axial skeleton. We're going to take 10, be back at that 10 after, and we will take our last few minutes before Dr. Fredette comes in to look at the panel and answer and talk about a test. All right, take 10, take 10, take 10. I'll be here though if you have any questions. I'm going to stop the recording, but if you have questions, I am here.