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Module	Week	Α	В	Lesson	Description
Introduction	0			Draw a Human Cell	What are the organelles inside a cell and what do they do? And what are organelles anyway?
				DIY Heart Pump	What does the heart do? How does it do that? Make your own working model!
	1			Systole & Diastole	What happens when the heart squeezes and relaxes?
				Intro to the Heart	What does the heart do and why is it so important?
				Blood and Blood Components	What makes blood red? What else does blood do?
	2			Heart In Situ Coloring	Where does the blood go when it leaves the heart? Where does it come back from?
				Heart In Situ Modeling	Where does the blood go when it leaves the heart? Where does it come from when it returns? How does it all fit
Circulatory System & Heart				Intro to Blood Pressure	What does blood pressure mean? How is it measured?
	3			Heart Murmurs, Attacks, and Failure	What can go wrong with the heart and why does it happen?
				Taking Good Care of Your Heart	How do our choices affect the heart and how can we help the heart do its job?
				Stethoscopes	What is a stethoscope and how is it used to listen to the heart?
	4			EKGs	How do EKGs work and what can they tell us?
				Heart Dissection	Does a heart actually look like the drawings in books or the models?
				Careers: Cardiology	
	5			Intro to Lungs	What do the lungs do and how do they do it?
				DIY Lungs Model	How do you get air into your lungs? Why do you need a diaphragm?
Respiratory System				How We Make Speech	How does speech happen and what areas of the body are involved? (Hint: it's not just the vocal cords!)
				Pneumonia	What are the different kinds of pneumonia and how do doctors determine them? See for yourself on real X-rays!
				Asthma	What is asthma? Why do people use inhalers?
				COPD and Smoking	What can go wrong with the lungs, and why?
	6			Careers: Pulmonology	
				Careers: Respiratory Therapist	
				Careers: Speech Therapist	

Module	Week	Α	В	Lesson	Description
Endocrine System				Intro to Hormones	What are hormones and how are they different from nerves?
	7			The HPA Axis	If our brain is in charge, how does that connect with hormones?
				Candy & Blood Sugar	Why do we love candy but it makes us feel so bad? What's a better way to get our sugar fix?
				Diabetes	What is diabetes and why are there sharp things involved?
				How We Grow	We all grow, but how? And where in our bodies? How do our organs know when to stop growing?
	8			Thyroid	Our metabolism is somewhere between a hummingbird and a slothbut how?
				Careers: Endocrinology	
				GI Overview	How do all the organs of the GI system work together to nourish you?
Gastointestinal System	9			Inside the Mouth	What are the parts of the mouth and how do they all work together? How does taste actually work, what are the bumps
				Teeth	Why do we have different kinds of teeth and how do dentists count them?
				Mini Activity: Dental Chart	How to dentists fill out dental charts?
	10			Dental Care	Why do teeth fall out? And why do they stay in? What are cavities and how do braces work?
				The Stomach and What Goes Wrong	Why do we vomit? What are ulcers?
				The Small Intestine	What does a small intestine do and what would happen if it didn't?
	11			The Liver and Hepatitis	What does the liver do and why does hepatitis matter?
				Liver Enzyme Experiment	What happens when liver detoxifies a waste product in your body?
				Liver Dissection	What does a liver look like in real life?
				The Pancreas	What jobs does the pancreas have?
	12			The Large Intestine	Why do we need a large intestine and what can go wrong?
				Modeling the GI System	How do the organs of digestion fit together to nourish your body? Make your own model out of clay!
				Careers: Gastroenterology	
				Careers: General surgeon	

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Immune System	13			Intro to the Immune System: Innate and Acquired	How is our body like a castle? How do we keep safe from infection?
				Intro to the Immune System: Meet the White Blood Cells	What are the different white blood cells and how do they work together to keep us safe?
				Bugs & Drugs	What are viruses, bacteria, and fungus? How are they different from each other and how are they treated?
				Vaccines	How do vaccines work? Are there different types?
				Scarlet Fever & Strep Throat	How are scarlet fever and strep throat related, and why aren't they as big a deal as they used to be?
				Allergies and Anaphylaxis	What goes wrong during an allergic reaction? Why is it important to not bringing peanuts to certain activities?
	14			Autoimmune Diseases	Why would the immune system attack a person's own body? What can be done to help?
	14			Careers: Immunology	
				Careers: Infectious Disease	
				Careers: Rheumatology	
	15			Intro to Bones	What are the different kinds of bones and their jobs?
				Intro to Joints	What the different kinds of joints and their jobs?
				Intro to Muscles	What are muscles and how do they allow us to move?
				Chicken Dissection	How is the inside of a chicken like the inside of a human? The answer is: in more ways than you'd think!
Musculoskeletal	16			Feet	Why are feet important and how do you care for them?
System				The Skull	What does your skull do for you? More than you think!
				Muscles of the Facial Expression	The muscles of the face are amazingsee them at work with the help of a little face paint!
				Cleft Lip & Limb Differences	What is cleft lip and what other differences can occur while the body is forming?
				Careers: Physical Therapy	
				Careers: Orthopedic surgery	
Integumentary System (Skin)	17			Intro to Skin, Hair, and Nails	What does our skin do? Why is it considered an organ? What are hair and nails?
				Cuts & Bruises	How do we heal? What's the difference between a cut and a bruise?
				UV Damage	Why is it important to protect our skin? And how?
				Careers: Pathology	
				Careers: Dermatology	

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Neurologic System				The Brain	What is the brain and how is it organized?
	18			Spine & Spinal Cord	What is the difference between a spinal cord and a spinal column? Why do you need them?
				Grey and White Matter	Are you using your grey matter? What about your white matter? Learn how they both matter!
	19			Sleep	We all have to sleep, but why? What are dreams for? And how can we get better sleep?
				Inner Brain Health	How do our feelings help us survive, what do we do when they're not helpful, and where are they in our brains and
				Using the Frontal Lobe	How do we make choices between what we SHOULD do and what we WANT to do, and how do we know what we should
				Amygdala	Where does the fight/flight/freeze response come from? Our brains are good at protecting us from bears but not so much
	20			Epilepsy	What is epilepsy? How is it diagnosed and treated? How can we be a good friend to someone with epilepsy?
				Careers: Neurology	
				Intro to the 8 Senses	How did we come up with 8 senses? What are they?
	21			Draw a Human Eye	What are the parts of the human eye and how do they allow us to see?
				Touch	How does touch work? What happens when it doesn't?
	22			Proprioception	How do you know where your fingers are? Find out about the incredible sense of proprioception!
				The Tongue and Nose	What is taste? How does a stuffy nose affect it?
				Interoception	Have you ever wondered how you know when you're hungry? Interoception is the answer!
8 Senses	23			The Ear and Hearing	How does hearing work and why does it sometimes not?
				Hearing & Vibrations	How do vibrations allow us to hear?
				Ear Infections	What are ear infections and why do we get them?
	24			Vestibular System	What does your inner ear have to do with being dizzy? What is vertigo and why are there rocks in your head?
				Tuning Fork	Why is a tuning fork with the medical instruments and what is it anyway?
				Careers: Anesthesiology	
				Careers: ENT	
Genetics	25			Intro to Genetics & The Human Genome	What is DNA? What are genes? How has our understanding of genetics changed in the recent decades?
				Mitosis & Meiosis	How do we have identical copies of our DNA in every cell but different DNA from our siblings?
				Protein Synthesis	How does our DNA actually DO anything in our body?
				The Genetics of Earwax	Did you know earwax is genetic? How do your genes compare with your actual earwax?

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Genetics				Blood Type	What is blood type and what does it have to do with our genetics?
	26			Punnett Squares	How do geneticists write out the possible combinations of genes? What's the likelihood of a specific combination?
	20			Pedigrees	How to draw a genetic family treeyours or someone else's!
				Careers: Geneticist	
				Follow a Red Blood Cell	Where do red blood cells come from and where do they go? And did you know your body has a recycling program?
	27			Follow the Oxygen	Where does oxygen go in the body and why do we need it so much?
Putting it Together (used				Mitochondria Mini Lesson	A supplement to Follow the Oxygen - how exactly does the mitochondria convert oxygen into energy?
with B+C schedules only)				Follow the Iron	How does iron move through your body? Watch this lesson after Small Intestine and Blood Components
	28			Hereditary Hemochromatosis (Iron	What causes iron overload and what do we do about it?
				Careers: Nurse	
	29			Intro to Nutrition	Why is it so tricky to study nutrition?
				Water	What does water do for us?
				Fiber	We don't even digest it so why is it so important to eat?
	30			Protein	Where do we get protein and what does it do?
Nutrition				Fat	Where do we get fat and what does it do?
				Carbohydrates	Where do we get carbohydates and what do they do?
	31			Vitamin	What are vitamins, why do we need them, and how do we get them?
				Minerals	What are minerals, how do we get them, and how do we eat rocks without eating rocks?
				How to Read Food Labels	Why is choosing the food we eat so complicated? How do our brains trick us and what can we do about it?
Healthy Choices	32			Safety	How do we make safe choices when we don't know what the safe choice is to make?
				Habits	How do we form habits, and how can implementing the tiniest things change our lives for the better?
				Thinking About the Future	How do you build a happy, fulfilling life? It's easier than you think!
				Careers: Different Paths	