Growle

Crowle primary Academy—Knowledge Organiser

Groude

Science	Focus
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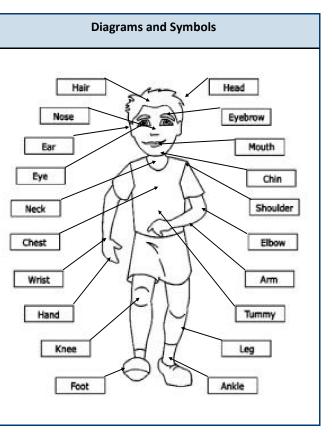
Animals Including Humans

Year 1/2

Term 1

What? (key knowledge)	
н	umans
Human beings	We are called humans We are from the family of ani- mals called mammals
Basic parts of the human body	Hair, head, ears, eyebrows, eyes, nose, mouth, chin, neck, shoul- der, chest, elbow, arm, wrist, hand, tummy, knee, leg, ankle and foot
There are 5 basic human senses	Touch, taste, smell, sight and hearing
How do we touch?	We touch using our skin (usually our hands)
How do we taste?	We taste by putting something in our mouth
How do we smell?	We smell by using our nose
How do we see?	We see by using our eyes
How do we hear?	We hear by using our ears
Animals	
Six types of animals	Invertebrates , Fish, Amphibians, Reptiles, Birds, Mammals
Some common inverte- brates	Crab, jellyfish, worm
Some common fish	Goldfish, cod, shark
Some common amphibians	Frog, toad, newt
Some common reptiles	Snake, crocodile, lizard
Some common birds	Sparrow, chicken, owl
Some common mammals	Human, dog, lion
Animals that eat meat	Animals that eat other animals are called carnivores
Animals that eat plants	Animals that eat plants are called herbivores
Animals that eat meat and plants	Animals that eat both plants and other animals are called omni- vores
Some common carnivores	Lion, tiger, brown bear
Some common herbivores	Cow, sheep, rabbit
Some common omnivores	Human, pig, rat

What? (key vocabulary)	
Invertebrates	Animals with no back bone
Fish	An animal with gills and fins that lives in water
Amphibians	An animal which can live on land or in water
Reptiles	An animal which has dry, scaly skin and lays eggs on land
Birds	An animal with feathers, wings and a beak that is usually able to fly
Mammals	An animal that feeds its young with milk from the mother and has skin usually more or less covered with hair
Pet	A friendly animal trained to live with hu- mans



Crowle

Science Focus

Animals Including Humans

Year 1/2

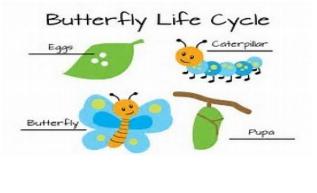
Term 1

What? (key knowledge)	
G	irowth
Growth in animals	Animals become older and change as time passes
3 examples of animal growth	Egg > chick > chicken Egg > caterpillar > pupa > butterfly Spawn > tadpole > frog
Example of Human growth	Baby > toddler > child > teenager > adult
Si	urvival
Things animals need to survive	Water, Food, Air, Shelter
Huma	an survival
Things humans need to survive	Water, Food, Air, Shelter
Things humans need to be healthy	To have a balanced diet of the right amount of different types of food and drink. To exercise regularly. To be hygienic.
What is a balanced diet?	See the Eatwell Guide (http://www.nhs.uk/Livewell/ Goodfood/ Documents/The-Eatwell-Guide- 2016.pdf) Drink 6-8 cups/glasses of fluids each day
What is regular exercise?	Adults needs to be active for at least 150 minutes each week Children aged 5 to 16 need to be active for at least 60 minutes each day Children under 5 need 3 hours of activity a day
What is good hygiene?	To maintain daily personal hygiene, you should make sure:your hands are washed after you've used the toilet, your private parts are washed every day, your face is washed daily, you're fully bathed or showered at least twice a week, your teeth are brushed twice a day

What? (key vocabulary)	
Offspring	A person or animal's child or children
Growth	The process of getting bigger
Pupa	An insect that is about to turn into an adult
Baby	A very young child
Toddler	A young child that is just beginning to walk
Child	A young person below the age of 13
Teenager	A person aged between 13 and 19
Adult	A grown up
Fluids	A liquid

Diagrams and Symbols





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Crowle primary Academy—Knowledge Organiser

Science Focus

Animals Including Humans

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Year 3/4

Term 1

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	ey knowledge)
N	utrition
Things animals need to survive (revisit)	Water, Food, Air, Shelter
Things humans need to survive (revisit)	Water, Food, Air, Shelter
Things humans need to be healthy (revisit)	To have a balanced diet of the right amount of different types of food and drink To exercise regularly To be hygienic
What is Nutrition?	Nutrition means animals getting the food they need to grow and be healthy
Can we make our own food?	No. Humans and animals can't make their own food. They get food by either growing it, hunting it or gathering it
What is meant by growing food?	Humans can grow their own food by planting seeds that they later harvest
What is meant by hunting food?	Humans can hunt other animals to eat
What is meant by gathering food?	Humans can find foods grown in the wild to eat
Skeleton	s and Muscles
What is a skeleton?	A skeleton is a structure of bones that supports the body of a person or animal
12 common parts of the skeleton we should know	Skull, clavicle, scapula, rib cage, humerus, spinal column, pelvis, ulna, radius, femur, fibula and tibia (See diagram)
What is a muscle?	A soft tissue in the body that contracts and relaxes to cause movement of the skeleton
19 common muscles we will look at	Front: Deltoids, pectoralis major, bi- ceps, anterior forearms, obliques, rectus abdominals, liopsoas, quadriceps, adductors and dorsi flexors Back: Trapezius, deltoids, latissimus
	dorsi, triceps, posterior fore- arms, lower back, gluteals, hamstrings and calves

What? (key vocabulary)		
Tissue	Tissue is part of the body of that is made of similar cells	
Contract	When a muscle becomes smaller, shorter and tighter	
	Diagrams and Symbols	
Skull —— Rib cage — Spinal colur Pelvis —— Femur —	Clavicle Scapula Humerus Ulna Radius Fibula Tibia	
Deltoids Pectoralis Major Biceps Anterior Forearms Obliques Rectus Abdominals Lliopsoas Guadriceps Adductors Dorsi Flexors	Trapezius Deltoids Latissimus Dorsi Triceps Posterior Forearms Lower Back Gluteals Hamstrings Calves	

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Science F

Animals Including Humans

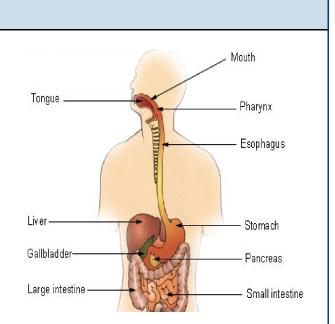
Year 3/4

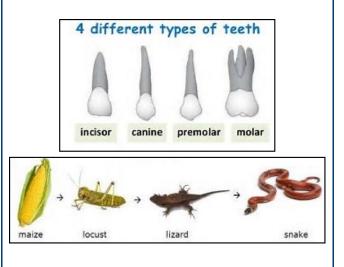
Term 1

What? (key knowledge)		
	nat: (Key knowledge)	
The	Human Digestive System	
What is digestion?	Digestion is the way the body breaks down the food we eat into smaller parts that can be used to give the body energy	
The Main Parts of the digestive system	Mouth, tongue, pharynx, oesophagus, liver, stomach, gallbladder, pancreas, large intestine, small intestine	
The digestive journey of food.	Humans put food into their mouth Food is chewed by the teeth Food is swallowed and passed through the pharynx and oesophagus to the stomach	
	In the stomach, it is mashed into a mixture like soup and mixed with acid The mixture passes into the small intestine, where tiny bits of food pass into the bloodstream The food that is still left goes into the large intestine	
	Finally, waste products leave the body	
	Human Teeth	
Teeth Facts	Teeth grow in babies when they are about 6 months old 20 teeth grow by the time you are about 2.5 years old From about age 6 you start to lose teeth till about the age 12 These teeth are replaced by 32 permanent teeth	
Types of teeth	Incisors, Canines, Pre-Molars, Molars	
What are Molars and Pre-Molars?	Back teeth for crushing and grinding food	
What are Canines?	Long pointed teeth for grabbing food	
What are Incisors?	Front teeth for snipping and cutting food	
Food Chains		
What is a food chain?	A food chain is a diagram that shows a producer and consumers A consumer can be a predator, prey or both The arrow means - <i>'is food for'</i>	
What is a producer?	Food chains start with a producer (usually a green plant or algae)	
What is a consumer?	Consumers get their food by eating plants or other animals	
What is a predator?	Animals which eat other animals are called predators	
What is prey?	Animals that are eaten by other animals	

What? (key vocabulary)	
Tissue	Tissue is part of the body of that is made of similar cells
Contract	When a muscle becomes smaller, shorter and tighter
Consumer	Get their food by eating plants or other animals
Producer	The thing at the start of the food chain.

Diagrams and Symbols





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Testicles

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Science Focus

Animals Including Humans

Year 5/6

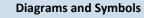
The part of the body in men where sperm

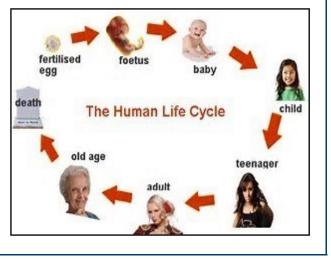
Term 1

w	hat? (key knowledge)	
	Human Growth	
The stages of hu- man lifeFertilised eggBabyBabyToddlerChildChildTeenagerAdultOld ageDeath		
Average UK life expectancy	Men: 79 Women: 82	
	Puberty	
What is puberty?	Puberty is when the body develops. Puberty usually happens between the ages of 10 and 18 During puberty, the bodies of boys and girls begin to change	
Changes for girls	Hair starts to grow on their bodies Breasts develop and hips widen Periods start	
Changes for boys	Hair starts to grow on their bodies Hair starts to grow on their faces Testicles start to produce sperm	

	is produced
Sperm	The fluid that fertilises the egg
Puberty	When the body develops

What? (key vocabulary)





Oxygen

Crowle

Science Focus

Animals Including Humans

Year 5/6

What? (key vocabulary)

The air we breathe in (revisit)

Term 1

What? (key knowledge)		
The Human Circulatory System		
The main parts of the human circula- tory system	Heart Blood vessels Blood	
What does the heart do?	The heart pumps the blood through the blood vessels so that food and oxygen can get to all the parts of the body	
What do the blood vessels do?	The blood vessels carry the blood around the body	
There are three main types of blood vessels	The arteries, which carry the blood away from the heart	
	The capillaries, which enable the ac- tual exchange of energy between the blood and the tissues	
	The veins, which carry blood from the capillaries back toward the heart	
What does the blood do?	Blood moves food and oxygen around the body.	
Healthy Lifestyles		
Things humans need to be healthy	To have a balanced diet of the right amount of different types of food and drink To exercise regularly To be hygienic	
What is a balanced diet?	See the Eatwell guide: (http://www.nhs.uk/Livewell/ Goodfood/ Documents/The-Eatwell-Guide- 2016.pdf) Drink 6-8 cups/glasses of fluids each day	
Health risks that can damage the body	Smoking Drugs Alcohol Obesity	
Dangers of smok- ing	Addictive Can cause heart disease and cancer	
Dangers of drugs	Addictive Can damage the brain or cause death	
Dangers of alcohol	Ok in small amounts for adults Can damage the liver, heart and stomach	
Dangers of obesity	Can cause heart disease Can lead to cancer	

Addictive	Substance that causes you to need more and more (out of control)
Diagrams and Symbols	
	Brain
	Heart
	Gut
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a A and a second A and a second B and a second	Image: State