OUR 3D CURRICULUM MODEL

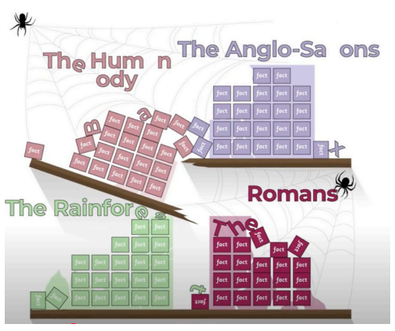
Developed for Highbank with Grammarsaurus

HIGHBANK PRIMARY AND NURSERY SCHOOL

The Grammarsaurus 3D Curriculum is a comprehensive model designed to transform how children learn by moving beyond the traditional "2D" plane of education, where facts and skills are taught in isolation. Instead, the 3D Curriculum integrates substantive knowledge (facts) with disciplinary knowledge (subject-specific skills) to create a deeper, interconnected understanding. This approach allows students to develop a web of knowledge across subjects, making learning more cohesive and memorable.

THE TRADITIONAL 2D MODEL

In a traditional 2D model of teaching, students typically acquire **substantive knowledge** (the facts) and **disciplinary knowledge** (skills) in isolation. For instance, in history, students may learn the facts about the Anglo-Saxons—such as their settlement in England in the 5th century—but this knowledge often remains disconnected from other subjects. Similarly, they may develop the skills of a historian—analysing sources or understanding chronology—but without a framework that links this to broader, cross-curricular learning.



The problem with this 2D approach is that it limits the depth and retention of knowledge. Facts may be learned, but without connections to other topics or real-world applications, they are often forgotten over time. Knowledge can remain "shelved" after each unit, collecting dust and disconnected from future learning.

A SHIFT TO A 3D APPROACH

The Grammarsaurus 3D Curriculum enhances this model by introducing key substantive concepts—big ideas that provide the glue between different topics and subjects. These concepts create a three-dimensional learning experience, where students are not only gaining knowledge within a subject but also seeing how it links with other areas of the curriculum.

For example, let's take the concept of "change" as a substantive idea. In history, students might explore change through the study of the Anglo-Saxons and how their arrival in England changed society. In geography, they could examine how environmental changes shape human settlement patterns. In English, the same concept might be explored through literature about societal transformation. These recurring themes create strong cognitive links, ensuring students can transfer their understanding from one subject to another, deepening their overall comprehension.

HOW THE 3D CURRICULUM WORKS

Substantive Knowledge: Students learn core facts and content in each subject area. For example, in history, they might learn key facts about the Anglo-Saxons or the Roman Empire.

Disciplinary Knowledge: Alongside learning facts, students develop specific skills needed in each subject. In history, this could mean analyzing historical sources or understanding the significance of events.

Key Substantive Concepts: This is the crux of the 3D model. Substantive concepts—such as "change," "power," "adaptation," or "interdependence"—link units of learning across different subjects. These concepts are revisited and reinforced over time, allowing students to connect facts across subjects and develop a deeper, more holistic understanding.

In Key Stage 1, for example, students first encounter the concept of "trade" through a book study of Jack and the Beanstalk, a unit on technology and toys, and a local study comparing Mexico to Clifton. As they move into Key Stage 2, the same concept of "trade" reappears in more advanced history and geography topics, such as studying the Industrial Revolution and environmental changes.

BUILDING LONG-TERM UNDERSTANDING

The beauty of the 3D Curriculum is that these substantive concepts act as mental hooks that students use to store and recall information. Instead of learning facts in isolation and forgetting them, students continually build on their understanding of these key concepts as they progress through school. The curriculum is designed to ensure that every new unit of work adds layers to previous knowledge, resulting in a robust, interconnected web of understanding.

This approach makes learning "stick" by embedding knowledge in students' long-term memory. Instead of simply remembering isolated facts, students can recall and apply broader concepts, ensuring they know more and remember more over time.

ASSESSING AND SUPPORTING LEARNING

Assessment is an integral part of the 3D Curriculum. Cumulative assessments track both substantive and disciplinary knowledge, allowing teachers to check for understanding and adjust their teaching as needed. Substantive knowledge and disciplinary skills are clearly mapped out, so teachers can ensure students are building upon what they already know and addressing any gaps in understanding.

Additionally, the curriculum includes tailored reading units that complement the learning in other subjects, ensuring students have every opportunity to reinforce and revisit key concepts. This helps deepen understanding and solidify knowledge even further.

OUTCOME? A DEEPER, MORE INTERCONNECTED LEARNING EXPERIENCE

By focusing on key substantive concepts, it ensures that students not only learn facts and skills but also see the bigger picture, linking their knowledge across subjects and years. This 3D approach builds a lasting, cohesive understanding that goes far beyond memorization, transforming how children learn and retain information.

OUR 3D CURRICULUM MODEL
AN OVERVIEW OF COVERAGE

KEY

Fieldwork Focus Unit

1 A unit that links with material taught in another year group. The number next to the link shows which year group the content links with.

Content that addresses themes of racial discrimination.

Content that addresses themes of gender stereotyping.

Content that addresses themes of loss.

Content that addresses themes of religious discrimination.

Content that addresses themes of age discrimination.

The suggested number of lessons a ‘block’ covers.

The suggested number of hours of teaching a ‘block’ contains.

At Highbank, our curriculum is deliberately cohesive, purposeful, and layered - what we call our 3D curriculum.

This approach ensures that learning is connected, deepened, and revisited across subjects and year groups, building a rich and secure body of knowledge over time.

Each curriculum map is anchored by a main topic driver that guides the learning for the half-term or term. Where possible, subjects link directly to this driver, helping pupils see meaningful connections across different areas of study. In some cases, the theme influences how subjects are approached - for example, shaping the choice of texts, artwork, or lines of enquiry in history or geography.

Running through our curriculum are carefully chosen substantive concepts - such as trade,—which act as threads that pupils encounter in different subjects and contexts. These recurring ideas help pupils make deeper connections between pieces of learning and understand how key ideas apply across disciplines and over time.

Where subjects do not link directly to the topic, this is intentional. These lessons either:

- Build pupils’ substantive knowledge as part of a carefully sequenced progression, or
- Revisit and reinforce prior learning in preparation for future units.

Nothing in our curriculum is random or disconnected. Every element has been deliberately chosen to build pupils’ knowledge, skills, and understanding in a coherent and purposeful way.

SUBSTANTIVE CONCEPTS AT HIGHBANK

TRADE

The action of buying and selling goods and services.

CIVILISATION

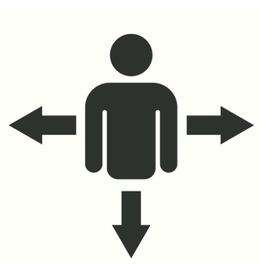
A complex society that has developed advanced systems of government, culture and technology.

INDUSTRY

Workplaces which turn raw materials into finished products or provide a service.

EMPIRE

A group of nations ruled by one ruler or government.



MIGRATION

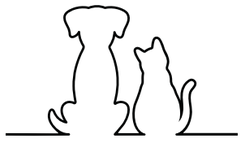
The movement of people to a new place to find better living conditions.

MONARCHY

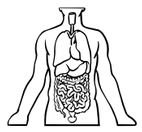
A form of government where the leader, like a king or queen, inherits the throne and holds th eposition for life or until they choose to abdicate.

SETTLEMENT

A place where people have settled to live.

Y1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus Topic	 Animals	 Toys	 Kings, Queens and Castles	 Hospitals and Healthcare	 Growing	 All at Sea
Driving Texts	Room on the Broom; The Ugly Five; Tiddler; Monkey Puzzle; Tabby McTat; The Highway Rat by Julia Donaldson	Traction Man is Here! Traction Man and the Beach Odyssey Traction Man Meets Turbo Dog by Mini Grey	Tell Me a Dragon The Castle the King Built The Knight Who Wouldn't Fight The Knight Who Said No The Knight with the Blazing Bottom Dragon Post Unicorn Post Monster Post by Emmar Yarlett	Hansel and Gretel Snow White The Extraordinary Life of Mary Seacole Little People; Big Dreams: Florence Nightingale & Rosalind Franklin We Love the NHS!	Jack and the Beanstalk Rumpelstiltskin The Elves and the Shoemaker The Gigantic Turnip Oliver's Vegetables The Extraordinary Gardener Bloom	Storm Whale Grandad's Island Lighthouse Keeper's Lunch At the Beach Look What I Found at the Seaside by Benji Davis
Writing Unit	Expectations Lines, captions and labels	PVPG Toy Man	Dragon Sentence Pattern Building Unit Recount: Dragon Post	Setting description: Candy House Plot Weave Narrative: Florence Saves the Soldiers	Narrative: Jack and the Beanstalk Instructions: How to grow a plant	Persuasive advert: Join the Pirate Crew! Poetry - Seaside Poetry
Science	How can we group animals? What makes us human?	Observe and record seasonal changes	Everyday materials: Why do we use different materials for different things?		Plants: How can we identify different plants and trees? Observe and record seasonal changes	
Geography	Where in the world do I live?			Fieldwork: My Local Park	Fieldwork: Our school environment	
History		How have toys changed over the last 60 years?	Where did Kings and Queens live through time? Nottingham Castle 	Which pioneering women have shaped healthcare and medical science?		
Art	Sculpture: Why do sculptors sculpt?			Chromatic: Does abstract art mean anything?		Monochromatic: What is drawing?
DT		Toy Makers' Workshop: How can we make a toy from recycled material that is fun and safe to play with?			Food - Plant Power: What tasty plant snacks can help us grow strong like Jack?	Textiles: Seaside Stitch Adventure. What shapes and colours will bring my seaside to life?

Y2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer Term		
Focus Topic	Minibeasts	Twisted Tales	Explorers	Super Veggies	Robin Hood	Lifecyles	The Great Fire of London
Driving Texts	The Hotel for Bugs The Big Book of Bugs Do you Love Bugs? Bug Hotel Mad About Minibeasts The Bug Collector The Girl Who Loves Bugs	Little Red Riding Hood Little Red The Very Hungry Lion Little Red: A Howlingly Good Fairytale with a Twist Three Little Pigs The Three Little Pigs and the Big Bad Book The True Story of the Three Little Pigs The Three Little Superpigs	Man on the Moon and Dougal's Deep Sea Diary – Simon Bartram Way Back Home and Lost and Found – Oliver Jeffers Charles Darwin's Around the World Adventure – Jennifer Thermes The Great Explorer – Chris Judge	Supertato; Supertato:Veggies Assemble; Supertato: Evil Pea Rules – Sue Hendra and Paul Linnett LOCAL AUTHOR – Here Be Monsters and The Book Family Robinson by Jonathan Emmett	Rapunzel Sleeping Beauty Robin Hood	Todd – Benji Davies The Woolly Bear Caterpillar – Julia Donaldson	Vlad and the Great Fire of London – The Great Fire of London: An illustrated history of the Great Fire of 1066
Writing Unit	Expectations: Pencil Grip and Letter Formation PVPG Non-Chronological Report: Marvellous Minibeasts	Recount Postcards/Letters: Little Red Wanted poster: Wanted! Have you seen this wolf? Narrative: The Three Little Pigs – A Twisted Tale	Recount: Diary: Charles Darwin's Journey Instructions: How to be a mighty explorer.	Narrative: Mighty Marrow Saves the Day! Persuasive: Join the floating library!	Narrative: Setting Description: Robin Hood Plot Weave	Explanation: How do Butterflies change?	Recount – Diary: Escape the Fire! Poetry
Science	How do we know something is alive?	Observe and record seasonal changes Materials: How are materials chosen in design?		How do seeds grow into healthy plants?	Animals including humans: Why do we need to keep healthy?		
Geography		Fieldwork: Visit local area	What are the similarities and differences between my town and Tulum, Mexico? 5 6				Fieldwork: How can we record and measure different weather phenomenon?
History	How has technology changed over the last 60 years?		Where have humans explored?		Robin Hood (local history)		How did the Great Fire change London?
Art		Monochromatic: How can pattern be used in art?		Chromatic – How can artists use colour?	Sculpture – How have artists been inspired by castles? 1		
DT	Textiles – Buzzing Book marks: How can you make a bookmark that's both fun and useful?			Food – Super veggies to the rescue: How can we make veggies fun and delicious?			Construction – London's Burning: Rebuilding History. How can we recreate houses from the time of The Great Fire of London using strong and stable structures?

Y3/4 CYCLE A	Autumn Term		Spring 1	Spring 2	Summer 1	Summer 2
Focus Topic	 The Human Body	 The Stone Age – Iron Age	  Ancient Egypt		 Roots and Shoots	 All About Bees
Driving Texts	The Couch Potato – Jory John and Pete Oswald Give Me Back My Bones! – Kim Norman	The First Drawing – Mordicai Gerstein How to Wash a Wooly Mammoth – Michelle Robinson 24 Hours in the Stone Age – Lan Cook Stone Age Boy – Satoshi Kitamura Land of Roar – Jenny McLachlan	Aladdin – Anna Bowles Leon and the Place Between – Angela McAllister Cinderella – Stephanie Stansbie	The Egyptian Cinderalla – Shirley Clima Marcy and the Riddle of the Sphinx – Joe Todd Stanton So you think you've got it bad? A kid's life in Ancient Egypt – Chae Strathie	Jack and the Baked Beanstalk – Colin Stimpson The Villains Version – Kaye Umansky	Oh Maya Gods – Maz Evans
Writing Unit	The Place Value of Punctuation and Grammar	Non Chronological Report: Prehistoric Park Recount: Stone Age Letter Narrative: The Land of Roar	Setting Description: The Tomb of Wonders Science Experiment: Do all magnets pull a paper clip from the same distance?	Characterising Speech – Egyptian Cinderella	Poetry Biography: Mystique – The Evil Fairy Plot Weave	Non-Chronological Report – All About Bees
Science	Animals including humans: How do the systems inside our body work to make a healthy human?		Forces and Magnets: How do magnets work?		Plants: How does each part of a plant fulfil its function? Light: How does light travel?	Rocks: How can we classify rocks?
Geography		What are the key geographical features of the UK and my region?	 Fieldwork: What facilities are in my local area and how do people travel there?			 Fieldwork: How can we make our school environment more bee friendly?
History	How did daily life change in Britain from the Stone Age to the Iron Age?			Early civilisation overview What were the greatest achievements of ancient Egypt?		
Art		Sculpture: How can where you live impact you as an artist?		Chromatic: What is illustration?		Monochromatic: How do artists draw faces?
DT		Textiles: Stone Age Mysteries – How can we make a pouch that is just right for a Stone Age adventurer?	Magnetic Mysteries – How can we use magnets to create a mysterious moving model?		Food – Roots and Shoots: What summer dishes can we make with root vegetables?	

Y5/6 CYCLE A	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Focus Topic	 Space	 Magic and Mysteries	 Fractured Fairytales	 Anglo-Saxons and Vikings	 Spotlight on Science	 The Mayans
Driving Texts	Hidden Figures - Margot Lee Shetterly Counting on Katherine - Helaine Becker Cosmic - Frank Cottrell Boyce	The Wizards of Once - Cressida Cowell or The Nowhere Emporium - Ross MacKenzie	Rumaysa - Radiya Hafiza	Beowful - Michael Murpurgo Arthur and the Golden Rope - Joe Todd Stanton	The Boy at the Back of the Class - Onjali Rauf On the Move - Michael Rosen	Oh Maya Gods - Maz Evans
Writing Unit	The Place Value of Punctuation and Grammar Non-Chronological Report: Planets of the Solar System or Luminara	Recount - Letter: The Wizards of Once or The Nowhere Emporium Setting description: Magical description	Recount - Diary: Raysha's Escape Narrative - characterising speech: Raysa vs Aashman	Instructions: How to raid and Anglo-Saxon settlement. Narrative: Artura and the Silver Lasso	Poetry Science experiment: Does the size of sugar affect how quickly it dissolves in water?	Narrative setting description: Lost Jungle City Plot Weave Persuasive Advert: Visit Mexico 2
Science	Earth and Space: How does the Earth fit into our solar system?	Living things and their habitats: How do different things reproduce?	Forces: How can we observe forces?		Properties and changes of materials: How do we separate materials?	Animals including humans: How do we change as we get older?
Geography	Fieldwork: What are the features of my local river?		Fieldwork: What trees, plants and animals are in our local ecosystems?		The United States: What are the similarities and differences between my region and the Western United States?	
History				How did England change during the settlement of the Anglo-Saxons?		What differences were there between the Maya civilisation and England during the 10th and 11th century?
Art	Chromatic: How realistic do portraits need to be?	Monochromatic: How can we find our own style of drawing?		Sculpture: How can flowers inspire artists?		
DT		Textiles - Moonlit Magic: Spooky Wall Hangings: What makes a magical moon scene exciting and fun to hang up?	Construction - Fairytale Engineering: Pulleys and Levers in Action: How can we use pulleys and levers to solve a problem in a fairytale world?			Food - Tasty Travels: Central America on a plate - How can we cook a dish that celebrates Central American flavours?