



**Kemnal
Technology
College**



KTC CURRICULUM AMBITION AND IMPLEMENTATION



KEMNAL HEARTS



KEMNAL MINDS



KEMNAL READS

Growing Hearts, Inspiring Minds



KTC Curriculum Ambition

Growing Hearts, Inspiring Minds

KTC Ambition

We are a community of learners who share the mind-set of determination and ambition. Curriculum is the DNA of the college and our mission is to inspire and grow our young Kemnal Hearts and Minds.

Our curriculum is underpinned by the mission and values of the college and our TKAT family. Our shared and common purpose is to ensure that the curriculum shapes our students' learning and life chances so that they can achieve success within a safe, inclusive and ambitious environment.

At KTC, we work collaboratively to create a relevant curriculum that gets under the skin of our students, provides an outstanding learning journey which enables them to meet the challenges of the evolving world while developing their independent skills. We place our students at the very heart of our curriculum.



KEMNAL HEARTS



KEMNAL MINDS

Reading critically for knowledge and understanding while promoting reading for pleasure

- ❖ **Equipping students for the future**
- ❖ **Improving students' life chances and opportunities**
- ❖ **Understanding of our values and beliefs**
- ❖ **Engaging with the wider community**

- ❖ **Knowledge Rich Curriculum**
- ❖ **Skills to help students progress**
- ❖ **Broad and balanced**
- ❖ **Engage and achieve: ambitious but inclusive**
- ❖ **Developing our students' independent skills**



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KEMNAL HEARTS

Throughout our Kemnal Hearts Curriculum, we aim to grow every student's personal development by creating a sense of kindness and ambition, as well as an acceptance of others whose beliefs and attitudes may be different from our own.

Our Kemnal Hearts Curriculum is delivered through a combination of PSHE, extra-curricular activities, enrichment opportunities and through reading. This aspect of our overall curriculum is centred around equipping our students with the skills and knowledge to allow them to be ambitious and globally informed citizens of the future.

It is important to us that our students can contribute in a purposeful and meaningful way in our college as well as the wider community. It prepares our students with the skills and knowledge to be successful beyond our college doors.



KEMNAL MINDS

Through our Kemnal Minds Curriculum, we aim to inspire and challenge our students to think critically and creatively while having the confidence to be inquisitive and independent in their learning.

We plan our curriculum collaboratively so all staff at KTC have an input on what is important for our students to learn, in order for them to achieve the very best academic results. Our curriculum is knowledge rich because we understand that a strong knowledge base will act as a gateway to other subjects, topics and disciplines.

At KTC we are passionate about reading as we know that this helps our students' learning and development in many ways. Reading is fundamental in our curriculum and we offer regular opportunities for this. Our aim is to instil a love for reading in our Kemnal Hearts and Minds.

Growing Hearts, Inspiring Minds



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SEND Curriculum Ambition

At Kemnal Technology College, our ambition for Special Educational Needs and/or Disabilities (SEND) is to ensure that all children achieve their potential regardless of need or disability. We believe that it is vital that our students are encouraged to develop the knowledge and skills needed to become ***ambitious, resilient and considerate learners*** both inside and outside of the classroom.

Through our assessment, planning, teaching and provision we:

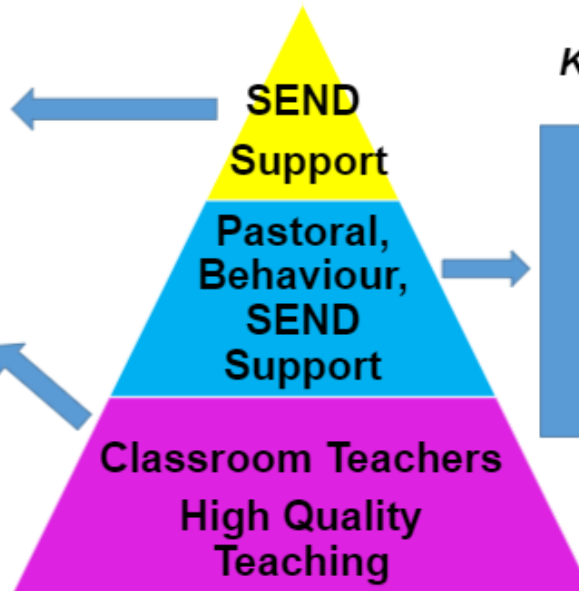
- Ensure that all children have access to a broad and balanced curriculum which is differentiated to enable children to follow the National Curriculum at a level and a pace that is appropriate to their abilities.
- Provide an accessible learning environment which is tailored to the individual needs of all children.
- Develop children's independence and life skills.
- Regularly monitor the progress of children with SEND, using a child-centered approach.
- Provide good quality and relevant training for all staff members supporting children with SEND.
- Work in partnership with parents and carers. Work closely with external agencies and other professionals to develop our provision for children with SEND.

Growing Hearts, Inspiring Minds



SEND Curriculum Support at KTC

- Individualised SEND support e.g 1:1 literacy/ numeracy/ phonics/ reading/ social skills
 - EHCP support
 - TA support in lessons
 - Therapy sessions
 - Counselling and mentoring
- Ambitious curriculum for all
 - Fantastic 4 pedagogical model (retrieval of prior learning, challenging new content, applying knowledge and checking understanding)
 - High challenge, low threat activities
 - Regular opportunities to read for understanding and pleasure
 - Shared strategies with all teachers and support staff
 - Close communication with TAs and parents



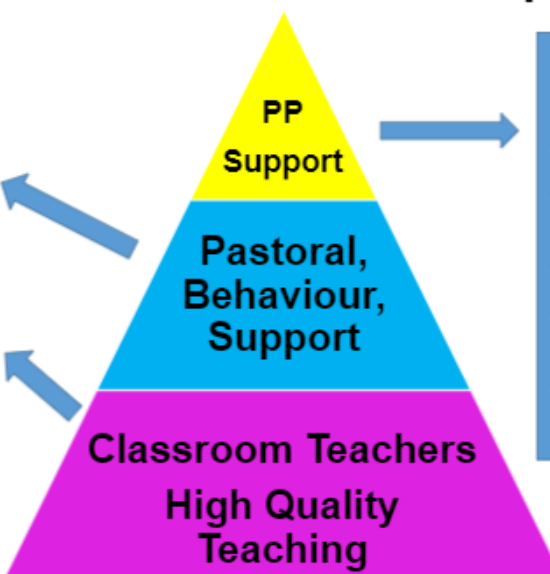
Every Teacher at KTC is a teacher of SEND

- Workshops in ICE
- Group interventions e.g Readers are Leaders Programme
- Ambition Tutor Programme
- Football Beyond Borders
- Strengthen Minds sessions
- Regular PSHE sessions
- Wrap around care
- Bromley wellbeing services
- School wellbeing page



Pupil Premium Curriculum Support at KTC

- Workshops in ICE
 - Ambition Tutor Programme
 - Football Beyond Borders
 - Strengthen Minds sessions
 - Regular PSHE sessions
 - Wrap around care
 - Bromley wellbeing services
 - School wellbeing page
- Ambitious curriculum for all
 - PP info on seating plans
 - Fantastic 4 pedagogical model (retrieval of prior learning, challenging new content, applying knowledge and checking understanding)
 - High challenge, low threat activities
 - Regular opportunities to read for understanding and pleasure



- Provide resources (ipads, clothing, books, stationary)
- Free Magic Breakfasts starting in Term 2
- Group interventions e.g Reading Matters Programme
- Year 11 Form Tutors contact home each week regards to academic support and well-being
- Extra- Curricular activities after school every day
- Individualised support e.g 1:1 literacy/ numeracy/ phonics/ reading/ social skills
- Teach First Tutors- English and Maths
- Counselling and mentoring

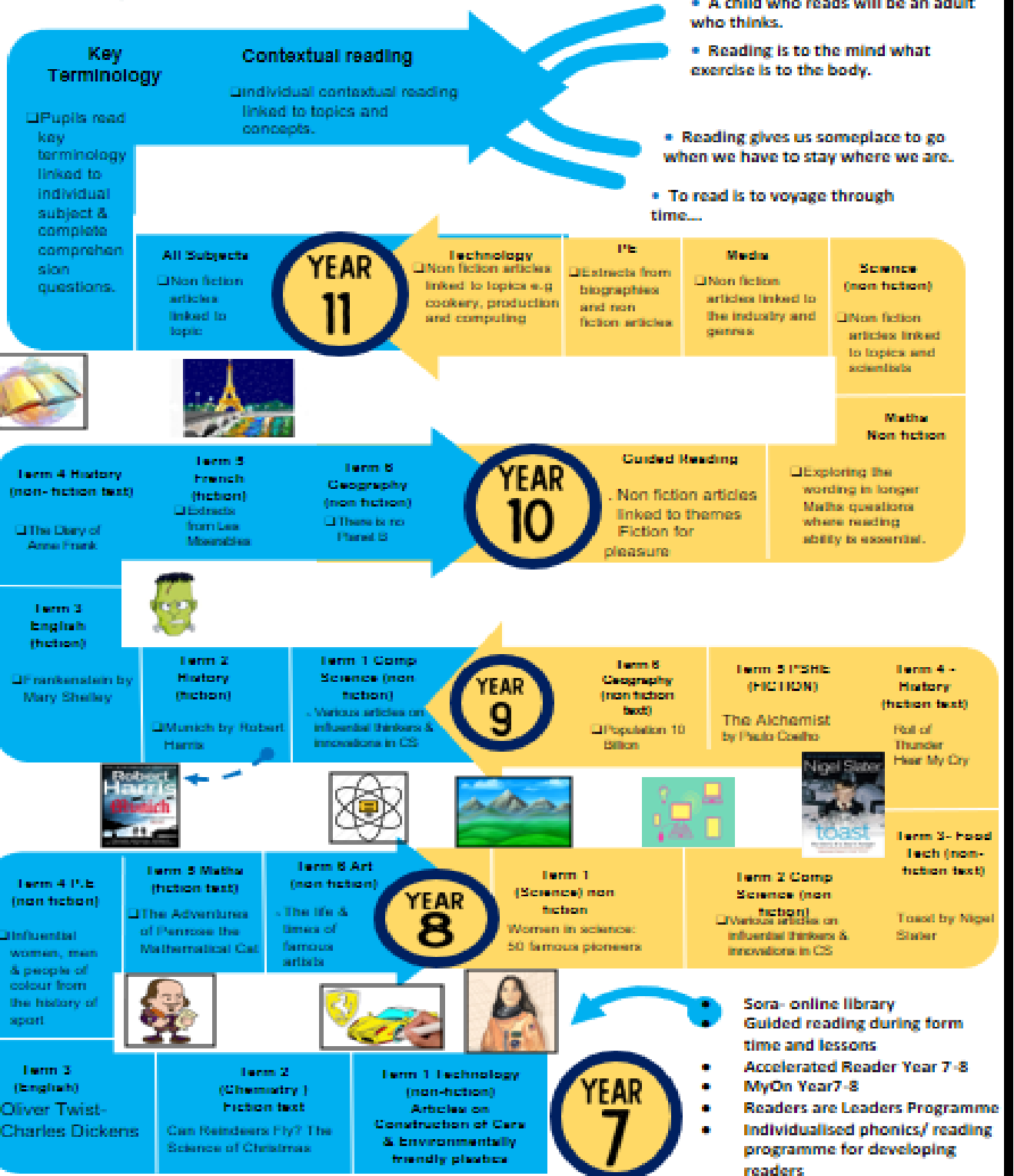


KEMNAL READS

- We have designed a Curriculum Reading Map that has been co-constructed by all subjects to ensure reading is a priority across the school. This map is underpinned by the National Curriculum Reading Framework and we have taken into account the context of our students.
- Guided reading during form time twice a week and once a week for 60 minutes with their form class.
- We offer regular opportunities to read in all lessons in every subject and it's included in our pedagogical model.
- We ask all students to carry a reading book in their bag as there are opportunities to read for pleasure throughout the school day.
- Weaker readers in Years 10 and 11 take part in our TKAT Reading Matters Programme
- Bespoke reading programmes are delivered by our SEND Team to both KS3 and KS4 students.
- Reward points are given to spend in our shop for students who read regularly.
- Accelerated Reader Programme- Years 7-8.
- Year 7-8s will have access to MyOn where they can access Accelerated Reader books and take part in quizzes.
- Years 7-9 have regular library lessons where they can read and change books. Years 10-11 can do this at break and lunchtime.



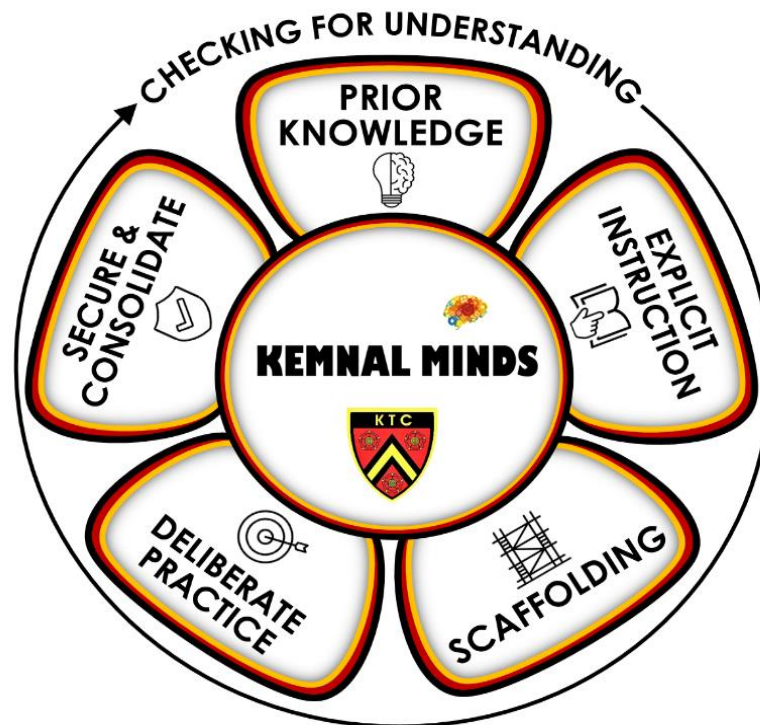
KEMNAL READS Curriculum Map





Our Pedagogical Model

This is how we deliver our Curriculum during lessons to ensure our students learn both knowledge and skills.



This is how we unlock our curriculum for our students, we document the 'core knowledge' they all deserve to know, regardless of their ability or need. The 'core knowledge' is followed by a set of retrieval questions/activities. These are used in lessons, for homework and used in preparation for quizzes and assessments. They can all be found on our website in each subject tab on the following link.

[Subjects - Kemnal Technology College \(ktc-tkat.org\)](http://ktc-tkat.org)



Here's an example of a Year 7 Science Kemnal Key



Year 7 – Kemnal Keys



	Biology	Chemistry	Physics
1	Animal Cells: Nucleus, Cell Membrane, Cytoplasm, Mitochondria and Ribosomes. Plant Cells contain all the above as well as Cell Wall, Vacuole and Chloroplasts.	In solids the particles are very close together. In liquid the particles are close together but can move in any direction. In a gas the particles are very far apart and move quickly in all directions.	There are 7 types of energy stores ; Thermal, Kinetic, Chemical, Gravitational Potential, Elastic Potential, Electrostatic and magnetic.
2	Eukaryotic cell any cell or organism that possesses a clearly defined nucleus A prokaryote is a simple, single-celled organism that lacks a nucleus and membrane-bound organelles	Solids – difficult to squash, can't be poured, can't change shape Liquids – difficult to squash, can be poured, can change shape Gas – can be squashed, can be poured, can change shape Intermolecular forces hold particles in their positions	Conservation Law of Energy: Energy cannot be created or destroyed, it can only be transferred from one store to another. Energy transfers are never perfect , energy will always be wasted. Total Energy Input = Useful Energy + Wasted Energy.
3	Specialized cells are cells that carry out a particular job. They have features that make them good at their role. Example :a root hair cell has large surface area to absorb water	Pure substance – contains only one type of particle. Mixture – made up of at least two pure substances.	Gravitational Potential Energy: Anything in a gravitational field. (anything that can fall). The higher up = more energy stored.
4	Cells are too small to see, so we use a microscope to view them. Magnification is the process of enlarging the apparent size, not physical size	Simple distillation can separate a liquid and a solid. Fractional distillation can separate a mixture of liquids like crude oil.	Kinetic Energy: Anything that is moving. Examples; Cars
5	Nucleus – the information centre of the cell Cytoplasm – chemical reactions take place Cell membrane – controls what goes in and out of the cell	Chromatography is a lab technique for separating components of a mixture – they travel through paper at different speeds.	Elastic Potential: Anything that is being stretched or compressed. Example; Springs
6	Mitochondria – powerhouse of the cell, creates energy through respiration Ribosome – makes protein to support cell operation. Cell Wall – gives the cell shape Vacuole – stores nutrients for the cell Chloroplasts – contains chlorophyll which are needed for photosynthesis.	Filtration – separates insoluble solids from liquids. EG Sand and Water. Evaporation – separates soluble solids from liquids. EG Salt and Water	Chemical Energy: Anything with energy that can be released by a chemical reaction. Examples; Food, fuel. Renewable Energy – Energy sources that will never run out. Non –renewable Energy – energy sources that will run out one day.

Quiz Time

Week 1 Quiz

Identify the 5 parts (organelles) of an animal cell
Which 3 organelles does a plant cell have that an animal cell does not?
Identify 3 types of energy stores
Particles are tightly packed and regular in which type of matter?
In a gas the particles move in all directions very _____?

Week 2 Quiz

What cell has a clearly defined nucleus?
What type of forces hold particles in their positions?
What is the conservation law of energy?
There is both useful energy and _____ energy
Place Solid, Gas and Liquid in order of particles containing the most energy

Week 3 Quiz

Where will an aeroplane have more GPE, on the runway or in the air?
Describe a specialized cell.
Describe a pure substance
Describe a mixture
Why would a root hair cell have a large surface area?

Week 4 Quiz

In science, _____ enlarge the image of cells so we can study them
Describe the difference between simple and fractional distillation
Describe the term kinetic energy
Describe the process of using a microscope
Describe the particle arrangement of liquid

Week 5 Quiz

Name 3 parts of a cell and describe their role
Describe the process of chromatography
Describe elastic potential energy
Identify an object that could have elastic potential energy
True or False a eukaryotic cell has a clearly defined nucleus?

Week 6 Quiz

Identify 3 parts of a plant cell and describe their role
Describe the process of filtration
Describe the process of evaporation
Describe the differences between renewable and non-renewable energy
Give an example of chemical energy