Parent Forum

Home Learning

Home Learning

- Amendments to our current Home Learning Policy

- Ensure more consistency across the school

- Make it easier for students to take more ownership of their learning and build independence – essential skills for GCSE and beyond

- More explicit links to work completed in school and build essential long-term memory skills needed for GCSE and beyond

Home Learning Policy

Year	Approximate volume of home learning tasks per subject	Frequency	Approximate volume and frequency per subject per half term (depending on the duration of the term)
KS3 (7&8)	30 minutes of home learning per subject	Every 2 weeks	120 minutes per subject, every half term
KS4 (9,10&11)	45 minutes of home learning per subject	Every 2 weeks	180 minutes per subject, every half term

Student Organiser:

Subject	Homework will be set on:	Homework will be due in on:
English	Wednesday Week A	Tuesday Week B
Maths	Tuesday Week B	Thursday Week A
Science	Monday Week A	Monday Week B

Knowledge Organiser

5H Angles and Trigonometry
5a Polygons, angles and parallel lines

Important ideas

7 sides / 5 triangles	The **sum of the interior angles** in a **polygon** can be calculated by thinking about the **number of triangles** that can fit inside the polygon. This is always **2 less than the number of sides**
360° 360°	It doesn't matter how many sides a polygon has, the **exterior angles** always add up to **360°**. If you cut them out, they would form a whole turn
A, D, B, C, E, ∠ABC, Line DE	When solving angle fact problems you must use **three-letter angle notation**, **two-letter line notation** and **state every angle fact** you use to tell the 'logical story' of how you solved the problem
Start → Finish	Sometimes there is **more than one way** to solve an angle fact problem. It doesn't matter which approach you use so long as it is **mathematically correct** and you **state all the angle facts** you use

Important vocabulary

Polygon	A **2D shape** made from 3 **straight sides** or more
Regular polygon	A **polygon** with **all sides equal** in **length** and **all interior angles equal** in size
Isosceles triangle	A triangle with **two equal length sides**. The two **base angles are equal** in size
Equilateral triangle	A triangle with **three equal length sides**. The **three interior angles** are **equal** in size
Interior angle	An angle between **two adjacent sides inside** a **polygon**
Exterior angle	An angle between a **side of a polygon** and an **adjacent side extended outward**
Parallel	**Lines** that have the **same distance continuously between** them. They **never intersect**

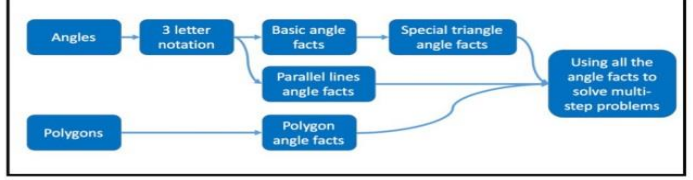### Key facts to memorise- polygon angle facts

Polygon names		Polygon angle facts	
3 sides	Triangle	Sum of interior angles in a polygon with n sides = (n − 2) × 180	(6 − 2) × 180 = 720°
4 sides	Quadrilateral		
5 sides	Pentagon	Sum of exterior angles in a polygon = 360°	360°
6 sides	Hexagon		
7 sides	Heptagon	Interior angle + exterior angle = 180°	180°
8 sides	Octagon		
9 sides	Nonagon		
10 sides	Decagon		

Key facts to memorise- basic angle facts

Basic angle facts	
Angles around a point add up to 360°	$a + b + c = 360°$
Angles on a straight line add up to 180°	$a + b = 180°$
Vertically opposite angles are equal	
Angles in a triangle add up to 180°	$a + b + c = 180°$
Angles in a quadrilateral add up to 360°	$a + b + c + d = 360°$
Base angles in an isosceles triangle are equal	
Angles in an equilateral triangle are all 60°	$a = 60°$
The exterior angle of a triangle is equal to the sum of the two opposite interior angles	$a + b = c$

Learning objectives knowledge structure

Angles → 3 letter notation → Basic angle facts → Special triangle angle facts → Using all the angle facts to solve multi-step problems

Angles → Parallel lines angle facts → Using all the angle facts to solve multi-step problems

Polygons → Polygon angle facts → Using all the angle facts to solve multi-step problems

Historical importance

300 BC	Greek mathematician **Euclid** writes a collection of 13 books called *The Elements*. These introduce and **prove angle facts** and important ideas in **number theory**. Starting from just **7** basic assumptions (**axioms**), Euclid proved all the angle facts we still use today. Most mathematicians say **The Elements** is the **most important** maths book ever written. It introduced the idea of using **logic** to **prove theorems** in maths.
250 BC	**Archimedes** used **Pythagoras' Theorem** in polygons to find **upper** and **lower bounds** for the value of **Pi**. He first imagined a circle **inscribed** by a **regular polygon** (vertices touching the circumference of the circle). He then imagined the same circle **circumscribed** by a **regular polygon** (midpoints of sides touching the circumference of the circle). By calculating the **areas** of the **polygons** and knowing the **area** of the **circle** was between these values he could find **upper** and **lower bounds** for the value of **Pi**.

Key facts to memorise- angles in parallel facts

Angles in parallel lines facts		
Corresponding angles are equal	Co-interior angles add up to 180°	Alternate angles are equal

Knowledge Organiser

Knowledge Organiser: British Society, 1939-75 - Immigration

Time line of key dates

1. 1940	1. Arrival of **Commonwealth** and **Empire** Servicemen and women
2. 1942	2. Arrival of **American 'GI's** (totalled around 3million)
3. 1945	3. End of the Second World War - many **PoWs** choose to remain in Britain
4. 1948	4. Arrival of **SS Empire Windrush** bringing immigrants from **Jamaica**
5. 1949	5. **Nationality Act** becomes law: gives all citizens of Br Empire free access to Br
6. 1955	6. **Transport workers** strike in Wolverhampton and Bristol in protest against 'coloured workers'
7. 1958	7. **August:** Violence between Black and White Youths in **Nottingham**
8. 1958	8. **September:** **Notting Hill Riots** - attacks on Black community by **Teddy Boys**
9. 1962	9. **Commonwealth Immigrants Act** - limits immigration to skilled workers.
10. 1965	10. **Race Relations Act** - illegal to discriminate on grounds of race.
11. 1967	11. Formation of the **National Front** Political Party
12. 1968	12. **Enoch Powell** delivers the '**Rivers of Blood**' speech in Birmingham
13. 1976	13. **Racial Equality Act** - made **racially offensive** music or publications illegal.

Key Individuals / Groups

14. Oswald Moseley	14. Former **fascist** leader - set up the **anti-immigration Union** movement.
15. Kelso Cochrane	15. Carpenter from **Antigua** that was **murdered** by 6 white youths.
16. Enoch Powell	16. Outspoken **Conservative MP** - known for '**Rivers of Blood**' speech
17. Jomo Kenyatta	17. Gave all **Kenyan Asians** 2 years to become citizens or leave.
18. Idi Amin	18. Ugandan dictator - **expelled 50,000 Asians** from Uganda
19. Peter Rachman	19. Landlord - provided **poor quality, expensive** accommodation for immigrants in West London
20. Sybil Phoenix	20. Immigrant - Helped establish **race relations** groups - awarded MBE

Key Terms / Concepts

21. Immigration	21. Act of coming to live permanently in another country.
22. Nationality	22. Status of belonging to a particular nation
23. GIs	23. American servicemen stationed in Britain in WW2
24. PoWs	24. Prisoners of war - captured enemy soldiers held in camps in Britain.
25. Windrush	25. Highly publicised ship that arrived in 1948 carrying immigrants from Jamaica.
26. Colour Bar	26. Discrimination that prevented black immigrants finding housing / jobs etc.
27. Race Relations	27. Relations between different races within one country.
28. Commonwealth	28. International association of UK and countries that were in Br Empire.

Wave 1 1940s	Wave 2 1950s	Wave 3 1960s & 70s
Irish American GIs PoWs Poles Commonwealth servicemen	Carribean (West Indies) Commonwealth	Asia (Indian Sub-continent) African Asians (Kenya, Uganda)

1. Knowledge Organiser

- Learn key facts/information on the Knowledge Organiser for short test next week signed by parent/carer.

- Use the Look-Cover-Write-Check method – across all subjects this would become very powerful as a revision method for students

- Prove it: (son/daughter) has spent 20 minutes revising his/her Knowledge Organiser signed:

- Link to Schemes of Learning building in short, low-stakes assessments, practice tests, self quizzing: 'testing interrupts forgetting'

- Help to form long-term revision methods and building long-term memory

Home Learning: 2-5

2. Widening vocabulary: Know and understand the key words from your subject.

- Learning vocabulary/subject terms using a dictionary to find meanings: signed learning by parent/carer ready for a quick quiz/low-stakes testing next lesson.

- Spellings: learn the spellings of key words, signed by parent/carer for a spelling test in class: starter activity.

3. Reading of a particular text, signed by parent. Create a reading log at the back of exercise book. This can include newspapers, websites connected to your subject. Direct students to particular texts

Home Learning Policy

4. **Write down 5 things you learnt** from today's lesson/5 things you want to know next for discussion next lesson – speaking and listening

5. Research of a particular area where students present findings in small groups. Use the learning triad (Literacy briefing 3/4/17) to continue with this in class – speaking and listening

Overall aims

- Should be set regularly and include Tasks 1-5 where home learning is not indicated in the Scheme of Learning at present
- Part of a strategy towards mastery and expertise
- Enable students to work independently at home and take ownership of their knowledge
- Used towards regular low-stakes testing and low-stakes testing that is revisited throughout the year
- Reinforces good study habits
- Encourage long-term memory recall – absolutely key for new GCSEs
- Builds Literacy underpinning all subjects
- Should be repeated if quality is poor – high expectations
- Whilst there will be occasions where this pattern may not always be followed, in the most part, students will be set homework as per table in Organisers