



HAMPSTEAD SCHOOL

Learning together Achieving together

Y11 – Y12

Summer Bridging Tasks

2025

CORE MATHS

Name: _____

- You should spend some time during the summer holidays working on the activities in this booklet.
- You will be required to hand this work in during your first lesson at the start of Year 12 and the content may be used to form the basis of your first assessments.

- You should try your best and show commitment to your studies.
- We are really looking forward to you coming to Hampstead School Sixth Form and studying Core Maths



HAMPSTEAD SCHOOL
Learning together Achieving together

Year 11 -> 12

Summer Bridging Work

Core Maths

Task

- Complete at least one of the tasks from the attached pdf
- Your teacher will check your work in September
- You will discuss your answers with the rest of your class in September as well

Have a lovely summer!



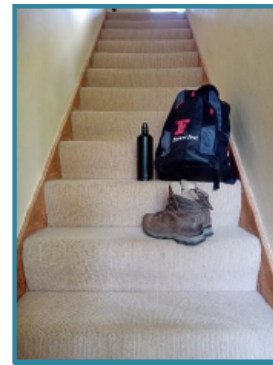
Task 1 – Bake a cake

1. **Bake a cake.** What maths is involved in this activity?
2. Write a 1-page plan, including detailed calculations, on how much money you could fundraise from making and selling this cake. You'll need to consider:
 - Cost of ingredients per cake;
 - How many cakes you can make, so how many slices you sell;
 - How much money you make, so how much profit;
 - Is this a good profit percentage so worth doing?
 - Consider time, set-up, energy and other costs.

Chosen cake:	
Ingredients:	Approximate cost of each ingredient:
How many does this recipe serve?	
How much does the cake cost per serving?	
How many can you make?	
What will you charge?	
Other costs involved (time, set-up, energy etc.)	
Estimated profit	
Is it worth it?	

Task 2 – Climb Ben Nevis

1. Walk up and down your stairs (or a staircase at school). What height do you climb? How long does it take you?
2. Research how high the largest mountain in the UK, Ben Nevis, is.
3. Calculate how long it would take you to complete the challenge of climbing the height of Ben Nevis at home.
4. Produce a double page magazine article on the 'Ben Nevis' home challenge, this could be as part of a daily fitness plan over a period of time, or a one-off charity event.



Height of chosen staircase	
Number of times climbed	
Overall height climbed	
Time taken	
Height of Ben Nevis	
Time it would take to climb Ben Nevis	
Any other factors I have not taken into account that might affect the time it takes	

Task 3 – Plan a Party

You are planning your 18th birthday party. Work out a budget for the party. You'll need to think about:

- Number of guests
- Cost of a venue
- Cost of invitations
- Cost of hiring a DJ or band
- Cost of food and drink

Number of guests		
Venue (check capacity to make sure there's enough room for all your guests)		
Cost of venue		
Cost of invitations		
Cost of DJ/band		
Food I'd like:		Cost of food:
Drinks:		Cost of drinks:
Other costs		
Total		
How will you pay for this party?		

Task 4 – New Car

A rich uncle is going to give you a second-hand car for your 17th birthday. Estimate the running costs for a year. Use online research to find the costs of road tax and car insurance. Can you afford to run a car? Would it be cheaper to use public transport?

Make and model of imaginary car	
Car tax (per month)	
Insurance (per month)	
Expected petrol consumption (per month)	
Expected cost of petrol (per month)	
Overall monthly cost	
What other costs might you need to consider when owning a car?	
Estimated monthly cost of public transport	
What's the better option?	