

A circular inset image in the top left corner shows four students in a dark room, illuminated by the light from a screen they are all looking at. They appear to be engaged in a collaborative activity, possibly a physics experiment or simulation. One student in the center-right is wearing a white t-shirt with a graphic of Adam and Eve.

Dr Lisa Jardine-Wright
Joint Director of STEM SMART
Director of Isaac Physics

*Affiliated Lecturer in Physics
Fellow of Churchill College
VP for Education & Skills IOP*



9:15 - 9:30

Get Ready



Welcome & Get ready to start: Please follow these 3 steps

1

- Go to moodle.isaacphysics.org and book mark this page in your browser.
- Login using the **details that were emailed to you on 15th December.**
 - Your username is the email address that you registered for STEM SMART.
 - If you think your password does not work, click on “forgotten my username or password”.
- Click on “**Launch: Sat 6 Jan**” (2nd square at the bottom of the page)

2

- Go to isaacphysics.org and login
- **If you are doing computer science:** go to adacomputerscience.org and login.
- You MUST use the **same email address to login** EVERY time.

3

Make sure you have with you **now**

- Notebook or paper
- Pens, pencils, ruler
- Scientific calculator
- A drink?



9:30 - 9:50

Welcome and Introductions



Housekeeping

Q&A FUNCTION

Please use this to post questions to us.

We will answer either by typing or verbally in the meeting at an appropriate time.

CHAT FUNCTION

You post ANSWERS to questions that we ask you.

- Do **NOT** post questions in the chat – we cannot keep track of questions or answer them in a timely fashion if they are in the chat.
- Do **NOT** post messages to other students – it is distracting and unhelpful to those who are trying to pay attention and make the most of this opportunity.

CODE OF CONDUCT

The code of conduct that you have signed requires you to NEVER share personal information with other students or staff online.

- Do **NOT** share any personal contact information on Zoom or Moodle or through any other means.
- Staff and students are obliged to report this if they see that it has happened.



Welcome: Meet the team

Physics



Nicki



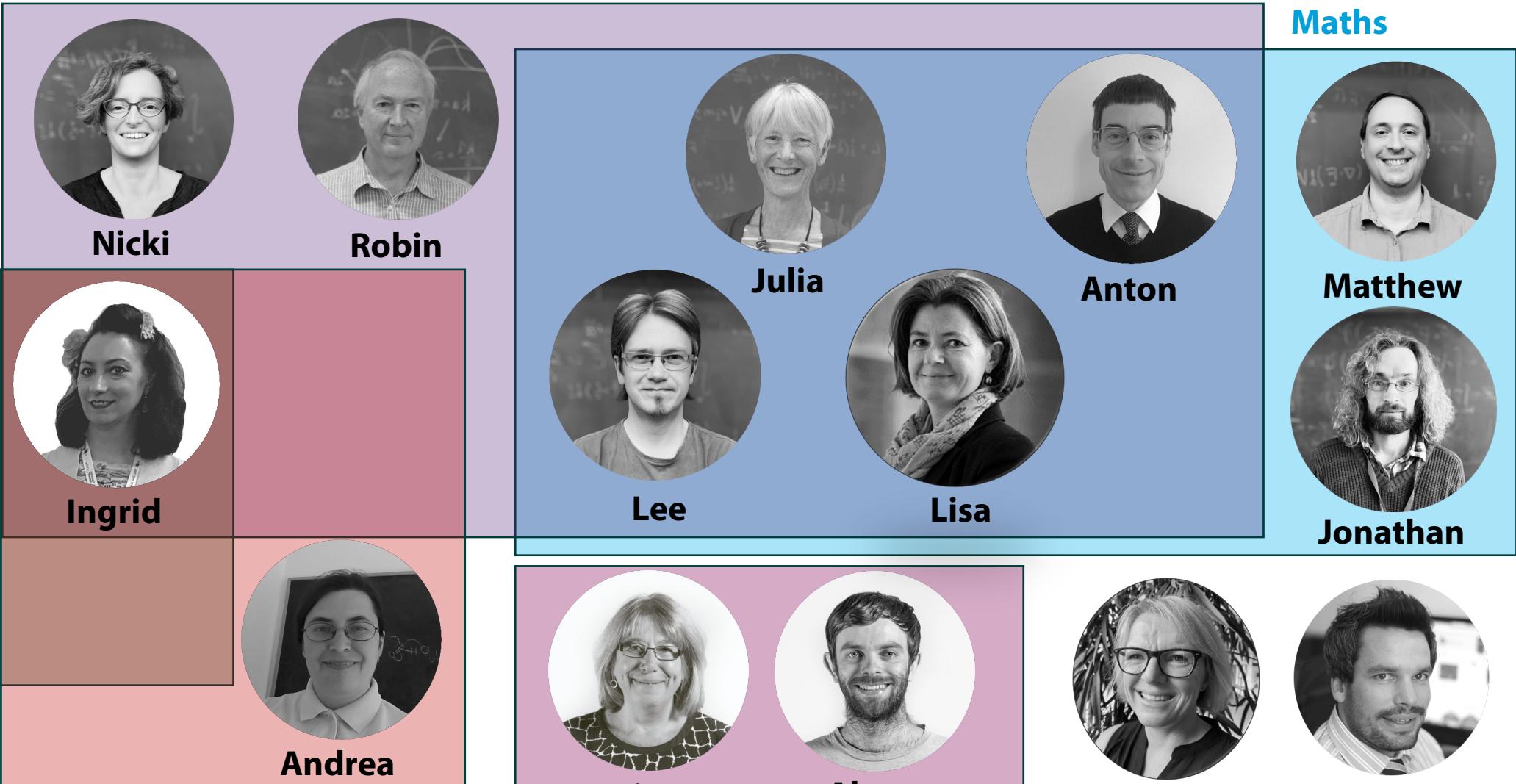
Robin



Lewis



Ingrid



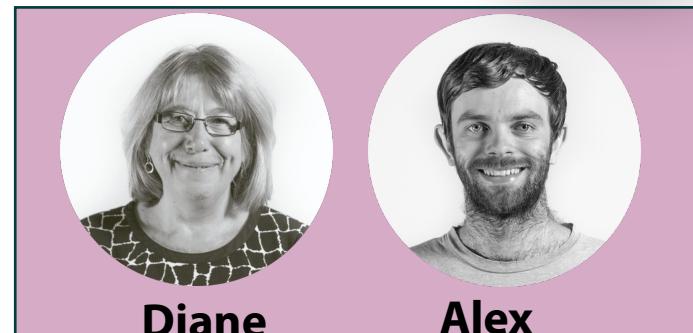
Maths



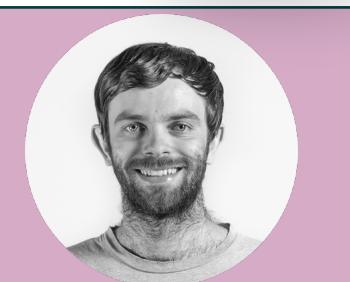
Matthew



Jonathan



Diane



Alex



Liz



David

Computer Science

Aims

RAISE ATTAINMENT

Raise A-level attainment and improve problem solving skills.

BUILD CONFIDENCE

Students who follow the programme, engaging regularly and frequently, will demonstrate a commitment to succeed, build confidence in managing their work, rest and play and have belief in their own ability.

STRENGTHEN APPLICATIONS

Continued engagement with the programme over 17-months will demonstrate a commitment to succeed which is viewed positively by employers and universities.

Regular and frequent practice in maths and science will improve admissions test scores and interview performance.



What can STEM SMART do for you?



A 2022 STEM SMARTie receiving their exam results in August 2023 and securing their university place to study Computer Science at Cambridge.

OUR DATA SHOWS THAT:

Students who **attempt more questions** and **attend more tutorials** on STEM SMART achieve:

- **Better examination grades**
- More likely to accept their **first-choice university place**

"STEM SMART has been very helpful for me. The tutorials have given me a more in-depth understanding of certain topics, and have revisited areas that I had gaps in.... I love maths, I love problem solving, but you still need to be disciplined to get the work done. I'd definitely recommend STEM SMART to others - it pushes you to revise, because it's a target you want to reach each week, that's separate from your college work."



What can STEM SMART do for you?

WHAT SHOULD YOU AIM TO DO?

- ✓ Follow a **maximum of 3** subject streams:
 - If you are doing **2 or 3 STEM SMART subjects at school**, you should **follow all of these subjects on STEM SMART**.
 - If you are doing **4 or more STEM SMART subjects at school**, you **should follow 3 subjects on STEM SMART**.
Either single or double maths and 2 science subjects that you find **most challenging at school**.
- ✓ This is **your programme**, and it is for you to decide how much extra work is sensible to do given your other commitments BUT it is better to do 3 subjects on STEM SMART and do more attempts and attend more tutorials than to do 4 subjects and not attempt very much in any of the 4.
- ✓ Certificates are awarded in **December** according to **question attempts and attendance at tutorials and mentor sessions** from **January 2024** to end **November 2024**:
 - **Gold = 70% or more**, **Silver = 55% - 69%**, **Bronze = 40% - 54%**
 - Participation = 10% - 39%



How does it work? Academic Plan

WEEKLY ASSIGNMENTS

2-3 hours per week



1 hour per subject per week
For each subject studied at school (up to max 3).

WEEKLY TUTORIALS

1-2 hours per week



1 hour maths
½ hour biology, chemistry, computer science & physics.

MENTORING

1 hour per fortnight



Phase 1 only



Timetable

Time	Activity / Action	Information & Links Use these links to jump to the relevant part of this page
9:15-9:30	Get ready <ul style="list-style-type: none">Join Zoom call and check technology is working.Logon to Isaac PhysicsLogon to Ada Computer Science (if doing computer science)	Jump to Get Ready links and information
9:30-9:50	Welcome & Introductions	Jump to Welcome & Introductions links and information
9:50-10:00	Goals & Core Values	Jump to Goals & Core Values links and information
10:00-10:45	Week 1: Mathematics Single Maths / Double Maths Assignment	Jump to Week 1: Mathematics links and information
10:45-11:00	BREAK	
11:00-11:30	Week 1: Physics & Chemistry	Jump to Physics & Chemistry session links and information
11:30-12:00	Week 1: Biology & Computer Science	Jump to Biology & Computer Science session links and information
12:00-12:15	Get set for STEM SMART: <ul style="list-style-type: none">Planning your spacePlanning your time	Jump to Get set for STEM SMART links and information
12:15-13:00	Meet your mentors + Q&A	Jump to our meet your mentors section to find out how to meet your group.
13:00	END	When you have finished your meeting with your mentor you are free to go.

9:30 – 9:50am: Welcome Using Moodle

- Make sure you are logged into moodle.isaacphysics.org
- Click on Launch: Sat 6 Jan
- Scroll to the timetable
- Use the links in the timetable to jump to the information for each session.
- Click on link “Welcome & Introductions”



[Mark as done](#)

Welcome & Introductions (9:30 - 9:50am)

In this section of the programme we will introduce you to the team that will be working with you on the STEM SMART programme.

We will also spend a time getting to know the **web platforms** (Moodle, Isaac Physics and Ada Computer Science) that you will be using for remote learning on STEM SMART.

Using Moodle

It is **most important** that each week you login to Moodle to see your weekly work.

Each week, the weekly page on Moodle will provide:

- hints and tips on managing your time, your workload and how to solve science and maths problems,
- support materials for each of your subjects such as
 - topic summary sheets
 - 1-2 min intro videos to help you get started or revise topics
- forums to contact your tutors and mentors to ask questions in preparation for the tutorials each week

Isaac Physics & Ada Computer Science:

Isaac Physics and Ada Computer Science will email you with your weekly assignments but please login to Moodle and don't just rely on these automated emails to do your weekly work as you will miss out on a huge amount of help and support.

Isaac Physics has a number of features such as maths and chemistry equation editors, graph sketcher and it asks that students think about their use of **significant figures**.

Have a go at entering some equations and graphs now.

1. Questions that ask for maths equations
2. Have a go at sketching a straight line graph
3. Try balancing some chemistry equations

Chemistry and maths equation editor video demonstration:



Ada Computer Science has a Boolean expression editor. You will be given instructions for using this when the relevant assignment is set.

9:30 – 9:50am: Welcome & Introductions

- Read through this section
- Attempt tasks 1, 2 and 3.
 - This information will always be on this page for you to refer to.
- When you have completed the tasks click "Mark as done" – this will help you to keep track of what you have finished.



9:50 -10:00

Goals and Core Values



What do you value?

What do you want to achieve?

Why is learning important to you?

What is important to you in Life?

Why might you try harder or try again?

What motivates you to learn?

How do you feel when you can't do something?

Why might you take on a challenge?



10:00 -10:45

Week 1: Mathematics



X X_n Maths Session (10:00 - 10:45am)

We will show you some of the questions on the first week's maths assignments (boards). Make sure you have a piece of paper and a pen ready to try these out with our guidance.

The aim is to build your skills and confidence by doing the questions. Do as many as you can in the time - each question is an achievement in itself. Some questions are a challenge, and our aim is to develop your ability and approach so that you can face these questions with confidence. The development will take time - so be patient with yourself, and use the tutorials to help you get 'unstuck'.

Now is also a good opportunity to make sure you:

1. join the Isaac Physics group.
 - click to join the SINGLE maths group
 - click to join the DOUBLE maths group

2. register with Zoom for your weekly maths tutorials. You will only need to attend ONE tutorial per week and that should be the same time and day each week.

Please click on one tutorial time to register for the weekly online tutorials on Zoom.

Single Maths

5:30 - 6:30pm Wednesdays

(start 10th Jan)

7 - 8pm Thursdays

(start 11th Jan)

Double Maths

6:30 - 7:30pm Wednesdays

(start 10th Jan)

7 - 8pm Thursdays

(start 11th Jan)

Get started on Week 1 Maths

Click on the purple "buttons" below to get started on your first week assignments.

Single Maths Week 1 - Algebra & Indices

Double Maths Week 1 - Algebra, Indices & Straight Lines

(pdf of the Single Maths assignment) (pdf of the Double Maths assignment)

Ask your subject tutors a question

If you have any questions that you want to ask your tutors as you answer your subject homework each week please post a comment or query (can be anonymous) in the text message box just below. These messages will only be seen by the tutors.

We encourage you to post messages as the questions occur to you rather than wait until the tutorial. This also means that the tutors can tailor the tutorial to your specific areas of interest and challenge.

After you submit a message, you will see it written below the box. If you refresh the page or logout and login again, the earlier messages will not reappear. BUT don't worry, they have DEFINITELY been sent to your tutors!

Enter your name (or leave blank to be anonymous)

Next

Week 1 Mathematics: Aims of this session

1. Join the relevant Isaac Physics maths group
2. Register for appropriate tutorials on Zoom
3. Get started on your maths work for week 1 (which starts on Monday)
4. Use our messaging app to post questions to your tutors.
5. Understand how your tutorials will work and how they will be structured.
6. At 10:25 – use the zoom poll to tell us which question you would most like to discuss.
7. At 10:30 - we will go through main points of top 2 most voted for questions.

In tutorials: You should aim to...

1. Write down key points that you have learned **after the tutorial – do not** aim to copy down everything that is written or everything that is said.
2. Tutorials will be webinars, like the current Zoom call, therefore **we ask that you use**
 - i. **Q&A function** to **ASK** questions
 - ii. **Chat** to **ANSWER** questions that your tutors will ask you
3. Listen carefully and follow any instructions that you are given
4. Have a go at answering questions
5. During the week after the tutorial, attempt any assignment questions that you hadn't tried or completed before the tutorial.



10:45 - 11:00

Breaktime



11:00 – 11:30

Week 1: Physics / Chemistry



Physics & Chemistry (11:00 - 11:30am)

We will show you some of the questions on the first week's physics and chemistry assignments. Make sure you have a piece of paper and a pen ready to try these out with our guidance.

We will also explain how to get the most out of a tutorial. Don't try to remember (or note) everything but you should practice making notes of key points that you need to remember - if you take away one or two key points or approaches, you have learned well.

- If you are studying **both physics and chemistry** then start with the first question on the physics assignment and then move on to the first question on the chemistry assignment.
- If you are studying **either physics or chemistry** then just focus on the one relevant assignment
- If you are studying **neither physics nor chemistry** then you can make a [start on the biology or computer science assignments](#) in the next session.

Now is also a good opportunity to make sure you:

1. Join the Isaac Physics groups

- [Click to join the chemistry group](#)
- [Click to join the physics group](#)

2. Register with Zoom for your weekly physics and/or chemistry tutorials. You will only need to attend **one tutorial per subject** per week.

Please click on one tutorial time to register for the weekly online tutorials on Zoom



Physics
5:30 - 6pm Mondays
(start 8th Jan)
6:15 - 6:45pm Thursdays
(start 11th Jan)



Chemistry
6:30 - 7pm Mondays
(start 8th Jan)
5:30 - 6pm Tuesdays
(start 9th Jan)

Get started on Week 1 Physics & Chemistry

Click on the purple "buttons" below to get started on your first week assignments.

Chemistry Week 1 - Atomic Structure

Physics Week 1 - Charge Flow

(pdf of the Chemistry assignment) (pdf of the Physics assignment)

Ask your subject tutors a question

If you have any questions that you want to ask your tutors as you answer your subject homework each week please post a comment or query (can be anonymous) in the text message box just below. These messages will only be seen by the tutors.

We encourage you to post messages as the questions occur to you rather than wait until the tutorial. This also means that the tutors can tailor the tutorial to your specific areas of interest and challenge.

After you submit a message, you will see it written below the box. If you refresh the page or logout and login again, the earlier messages will not reappear. BUT don't worry, they have DEFINITELY been sent to your tutors!

Enter your name (or leave blank to be anonymous)

Next

Week 1 Physics / Chemistry: Aims of this session

1. Join the relevant Isaac Physics groups
2. Register for appropriate tutorials on Zoom
3. Get started on your physics and/or chemistry work for week 1 (which starts on Monday)
4. Use our messaging app to post questions to your tutors.
5. At 11:10 we will discuss the most voted for physics question
6. At 11:20 we will discuss the most voted for chemistry question

11:30 -12:00

Week 1: Biology / Computer Science



Mark as done

Biology & Computer Science (11:30am - 12:00pm)

We will show you some of the questions on the first week's biology and computer science assignments. Make sure you have a piece of paper and a pen ready to try these out with our guidance.

We will also explain how to get the most out of a tutorial. Don't try to remember (or note) everything but you should practice making notes of key points that you need to remember - if you take away one or two key points or approaches, you have learned well.

- If you are studying **both biology and computer science** then start with the first question on the biology assignment and then move on to the first question on the computer science assignment.
- If you are studying **either biology or computer science** then just focus on the one relevant assignment.
- If you are studying **neither biology nor computer science** then you can continue to work through the maths assignment or the physics or chemistry assignments that we looked at in previous sessions.

Now is also a good opportunity to make sure you:

1. Join the Isaac Physics and Ada Computer Science groups

- Click to join the biology group
- Click to join the computer science group

2. Register with Zoom for your weekly biology and/or computer science tutorials. You will only need to attend **one tutorial per subject** per week.

Please click on one tutorial time to register for the weekly online tutorials on Zoom



7-7:30pm Tuesdays
(start 9th Jan)
5:30-6pm Thursdays
(start 11th Jan)



7-7:30pm Mondays
(start 8th Jan)
6:15-6:45pm Tuesdays
(start 9th Jan)

Get started on Week 1 Biology & Computer Science

Click on the purple "buttons" below to get started on your first week assignments.

[Biology Week 1 - Cell Structure 1](#)

[Computer Science 1 - Computer Systems Architecture](#)

(pdf of the Biology assignment) (pdf of the Computer Science assignment)

Ask your subject tutors a question

If you have any questions that you want to ask your tutors as you answer your subject homework each week please post a comment or query (can be anonymous) in the text message box just below. These messages will only be seen by the tutors.

We encourage you to post messages as the questions occur to you rather than wait until the tutorial. This also means that the tutors can tailor the tutorial to your specific areas of interest and challenge.

After you submit a message, you will see it written below the box. If you refresh the page or logout and login again, the earlier messages will not reappear. BUT don't worry, they have DEFINITELY been sent to your tutors!

Enter your name (or leave blank to be anonymous)

Next

Week 1 Biology / Computer Science: Aims of this session

1. Join the relevant Isaac Physics and/or Ada Computer Science groups
2. Register for appropriate tutorials on Zoom
3. Get started on your biology and/or computer science work for week 1 (which starts on Monday)
4. Use our messaging app to post questions to your tutors.
5. At 11:40 we will discuss the most voted for biology question
6. At 11:50 we will discuss the most voted for computer science question

12:00 -12:15

Get set for STEM SMART



Get set for STEM SMART: Aims

1. Give you some advice on how best to set yourself up to succeed on the programme.
2. Introduce how to use an electronic calendar to keep on track with your work and **not** miss tutorials or mentoring sessions.



Get set for STEM SMART: Life skills - get organised

The screenshot shows a user interface for the STEMSMART platform. At the top, there is a navigation bar with the STEMSMART logo, Home, Dashboard, My courses, and More options. On the right side of the header are search, notification, and edit mode buttons. Below the header, a video player is displayed with the title "Get set for STEM SMART (12:00 - 12:15pm)". The video player has a play button and the STEMSMART logo. A pink arrow points from the text "Get organised!" inside the video player to the green arrow pointing to the "Take a few minutes now to enter your tutorial times in your calendar or diary." button at the bottom. Another pink arrow points from the "Mark as done" button to the green arrow pointing to the same diary entry button. The video player also contains a text block: "It is important to organise your space and give yourself the best environment for learning but it is also very important to organise your time. We do recommend using an online calendar such as [Google calendar](#) or a calendar on your phone to help you to remember when your tutorials are so that you don't miss out on our free help and support!". At the bottom of the video player, there is a green button with white text that says "Take a few minutes now to enter your tutorial times in your calendar or diary.".

1. Watch the 2-minute video.
2. Make sure you have all of your tutorial times in a diary or online calendar.
3. Mark this as done when you have completed both 1 and 2.

Calendar

Today

January 2024

SUN MON TUE WED THU FRI SAT

7 8 9 10 11 12 13

Meet with...

Search for people

Time Insights

7 - 13 JAN 2024

13 hrs in meetings (avg: 5.2 hrs)

More insights

My calendars

Lisa Jardine-Wright

Birthdays

Calendar (This computer o...)

Churchill 51E

Isaac Physics Events

Isaac Physics Work

NST Student Calendar

Outreach Planning Schedule

Tasks

Other calendars

Holidays in United Kingdom

Term dates daily (full term)

Get set for STEM SMART: Using an online Calendar

1. Most smart phones have a calendar app – we encourage you to use this and to set reminders.
2. An example online calendar is Google Calendar calendar.google.com
3. Your mentors will be able to help you with how to use this
 - ✓ it can be set to message you with reminders for your tutorials and mentoring sessions so that you don't miss them.

12:15 - 12:45

Round-up & Meet your mentors



STEM SMART 2024 Phase 1

Course Participants Grades Question bank Competencies

What is STEM SMART?

SMART stands for Subject Mastery and Attainment Raising Tuition. This course aims to support your maths and science study as you learn and prepare for your examinations, and provide advice and tuition for application to university courses.

The course is structured in 3 phases:

- **Jan - July 2024:** Consolidating Knowledge and Building Problem-Solving Skills
- **Sep - Dec 2024:** Preparing for Application to Competitive Universities (optional 4 day residential in Cambridge, 19 - 22 August)
- **Jan - May 2025:** Securing Strong Examination Performance and Achievement



Each Saturday, (before the Monday start of each week), a new tile will be revealed below - click on the tile to work through the activities for the week.

Important Announcements

From your tutors

Mentor Forum

Getting Started

Launch: Sat 6 Jan

Phase 1: Weekly Plan

Week 1: 8th Jan

Round-up

1. Make sure that you have in your calendar all your tutorial times and your mentor meeting times.
2. **Each week** you login to Moodle and work through the page for the week.
 - A new “tile” will appear each Saturday ready for the following week. (e.g. Week 2 tile will appear on Sat 13th Jan).

STEM SMART 2024 Phase 1

Course Settings Participants Grades Reports More

Phase 1: Weekly Plan

Week 1: 8th Jan

The next 7 weeks are the first part of Phase 1 of the STEM SMART programme. The table below provides a summary of the content for the week, with links to the beginning of each individual activity.

You may find it helpful to use the small square checkboxes at the side of activities to mark what you have and haven't done - some of these will tick automatically as soon as your activity is submitted.

Start Date	Tin of the Week	Single Maths	Double Maths	Physics	Chemistry	Biology	Computer Science	Tutorials	Mentoring
Week 1: 8th Jan	How to get started on a question	Algebra & indices	Algebra, indices & straight lines	Charge flow	Atomic structure	Cell structure 1	Computer systems architecture	Subject tutorials	Getting to know you

Available from 5 January 2024, 9:00 AM



Opening self-evaluation week 1



to do:

View



to do:

Submit feedback

Single Maths: Algebra & Indices

We use algebra as a fundamental tool to represent mathematical models and solve problems. This week we will revise ideas of powers and indices from GCSE and apply them to A-level situations. We will also look at how to form, rearrange and manipulate algebraic expressions and equations.

This week's assignment

[STEM SMART Single Maths 1 - Algebra & Indices](#)

(pdf of the assignment)

If you have specific queries as you study this material and answer the questions, please post an anonymous comment or query using the text box at the top of this page.

E.g. Week 1

(and every week afterwards)

1. Login to Moodle
2. Use the links at the top to jump to the section you wish to work on.
3. In each subject section, click on the purple button / link to go to the assignment (list of questions) on Isaac Physics or Ada Computer Science.
4. Have a go at the questions, writing down your method and solution in your notebook.



STEM SMART 2024 Phase 1

Course Settings Participants Grades Reports More

Phase 1: Weekly Plan

Week 1: 8th Jan

The next 7 weeks are the first part of Phase 1 of the STEM SMART programme. The table below provides a summary of the content for the week, with links to the beginning of each individual activity.

You may find it helpful to use the small square checkboxes at the side of activities to mark what you have and haven't done - some of these will tick automatically as soon as your activity is submitted.

Start Date	Tin of the Week	Single Maths	Double Maths	Physics	Chemistry	Biology	Computer Science	Tutorials	Mentoring
Week 1: 8th Jan	How to get started on a question	Algebra & indices	Algebra, indices & straight lines	Charge flow	Atomic structure	Cell structure 1	Computer systems architecture	Subject tutorials	Getting to know you

Available from 5 January 2024, 9:00 AM



Opening self-evaluation week 1

Single Maths: Algebra & Indices

We use algebra as a fundamental tool to represent mathematical models and solve problems.

This week we will revise id situations. We will also look equations.

This week's assignments

STEM SMART Single Maths

[\(pdf of the assignment\)](#)

If you have specific queries anonymous comment or a

Main course page

Week 2: 15th Jan

E.g. Week 1

(and every week afterwards)

1. Login to Moodle
2. Use the links at the top to jump to the section you wish to work on.
3. In each subject section, click on the purple button / link to go to the assignment (list of questions) on Isaac Physics or Ada Computer Science.
4. Have a go at the questions, writing down your method and solution in your notebook.
5. As you work through the weekly work – use the messaging app to ask your tutors questions.

Ask your subject tutors a question

If you have any questions that you want to ask your tutors as you answer your subject homework each week please post a comment or query (can be anonymous) in the text message box just below. These messages will only be seen by the tutors.

We encourage you to post messages as the questions occur to you rather than wait until the tutorial. This also means that the tutors can tailor the tutorial to your specific areas of interest and challenge.

After you submit a message, you will see it written below the box. If you refresh the page or logout and login again, the earlier messages will not reappear. BUT don't worry, they have DEFINITELY been sent to your tutors!

Enter your name (or leave blank to be anonymous)

Next

STEM SMART 2024 Phase 1

Course Participants Grades Question bank Competencies

What is STEM SMART?

SMART stands for Subject Mastery and Attainment Raising Tuition. This course aims to support your maths and science study as you learn and prepare for your examinations, and provide advice and tuition for application to university courses.

The course is structured in 3 phases:

- Jan - July 2024: Consolidating Knowledge and Building Problem-Solving Skills
- Sep - Dec 2024: Preparing for Application to Competitive Universities (optional 4 day residential in Cambridge, 19 - 22 August)
- Jan - May 2025: Securing Strong Examination Performance and Achievement



Each Saturday, (before the Monday start of each week), a new tile will be revealed below - click on the tile to work through the activities for the week.

Important Announcements

From your tutors

Mentor Forum

Getting Started Launch: Sat 6 Jan Phase 1: Weekly Plan

A pink arrow points from the text "Each Saturday, (before the Monday start of each week), a new tile will be revealed below - click on the tile to work through the activities for the week." down to the "Week 1: 8th Jan" tile.

Round-up

1. Make sure that you have in your calendar all your tutorial times and your mentor meeting times.
2. **Each week** you login to Moodle and work through the page for the week.
 - A new “tile” will appear each Saturday ready for the following week. (e.g. Week 2 tile will appear on Sat 13th Jan).
3. Get started on your week 1 work, **making sure that you:**
 - Keep a notebook / file of solutions for each subject. **You must get into the habit of writing down your answers.**
 - Enter your answers into Isaac Physics and Ada Computer Science as you go along
 - Post messages to your tutors using the text box in Moodle, explaining what you would like to discuss or which questions you want to go through
4. Tutorials start **FROM MONDAY (2 days time)**
5. If you have questions about the STEM SMART programme, then please email stemsmart@isaacphysics.org

Recognising students' efforts: Additional opportunities

- **Key point:** This is **YOUR** programme – you should do as much as you feel comfortable and able to do.
 - The programme is about **how much you try** not about getting everything correct.
 - Be kind to yourself
 - Any concerns at any point email **stemsmart@isaacphysics.org**
- Students who are **most engaged in Phase 1 (between January and July)** will be **offered** additional opportunities.
 - A residential in Cambridge from 19th – 22nd August 2024 (this date is fixed and will not be changed)
 - Small group supervisions in phase 2 with Cambridge researchers.
- **How do we measure engagement?**
 - Proportion of questions they have **attempted** (in their assignments).
 - Proportion of tutorials they have attended.
 - Proportion of mentor sessions and optional STEM SMART lectures attended.



Thank you → Mentor Meet

Thank you for attention and hard work today.

We all look forward to working with you
throughout STEM SMART.



Meet your mentors

1. Meet your mentors – Cambridge students who will meet with you once every two weeks to discuss general topics about life at university.

- ~15 – 20 other STEM SMART students in your group
- Mentors **will not answer** questions about your **subject assignments** – if you are stuck on a question then use the text box at the top of each week on Moodle to message the tutors.

2. Mentors will confirm when and how you will meet using the mentor forum on Moodle.

- Try this out in a moment.

STEM SMART 2024 Phase 1

Course Participants Grades Question bank Competencies

What is STEM SMART?

SMART stands for Subject Mastery and Attainment Raising Tuition. This course aims to support your maths and science study as you learn and prepare for your examinations, and provide advice and tuition for application to university courses.

The course is structured in 3 phases:

- Jan - July 2024: Consolidating Knowledge and Building Problem-Solving Skills
- Sep - Dec 2024: Preparing for Application to Competitive Universities (optional 4 day residential in Cambridge, 19 - 22 August)
- Jan - May 2025: Securing Strong Examination Performance and Achievement



Each Saturday, (before the Monday start of each week), a new tile will be revealed below - click on the tile to work through the activities for the week.

Meet your mentors

1. The mentor forum

- Only mentors can post discussion topics
- You can only see other students' replies or comments when you have posted something yourself.
- Only your group (mentors and students) will see your reply.
- You will only see the discussions within your own group – no other group's discussions.

STEM SMART 2024 Phase 1

Course Participants Grades Question bank Competencies

What is STEM SMART?

SMART stands for Subject Mastery and Attainment Raising Tuition. This course aims to support your maths and science study as you learn and prepare for your examinations, and provide advice and tuition for application to university courses.

The course is structured in 3 phases:

- Jan - July 2024: Consolidating Knowledge and Building Problem-Solving Skills
- Sep - Dec 2024: Preparing for Application to Competitive Universities (optional 4 day residential in Cambridge, 19 - 22 August)
- Jan - May 2025: Securing Strong Examination Performance and Achievement



Each Saturday, (before the Monday start of each week), a new tile will be revealed below - click on the tile to work through the activities for the week.

Important Announcements

From your tutors

Mentor Forum

Getting Started

Launch: Sat 6 Jan

Phase 1: Weekly Plan

Week 1: 8th Jan

Time to meet your mentors

The screenshot shows the STEM SMART Mentor Forum interface. At the top, there's a navigation bar with the STEM SMART logo, Home, Dashboard, My courses, More, a search icon, a notifications icon, a user profile icon, and Edit mode. Below the navigation is the course name SMART2024P1 / Mentor Forum. The main title is "Mentor Forum". A sub-navigation bar includes Forum, Settings, Advanced grading, Subscriptions, Reports, and More. A descriptive text block states: "This forum is where your mentors will post important information for your group. You may respond to their messages and suggest questions for your mentor meeting discussions. You will only see what other people have asked or replied once you have posted a reply or message yourself. Only members of YOUR group will see these messages and only after they have made at least one contribution themselves." Below this are search and add topic buttons, and a dropdown for separating groups. The main content area is titled "Discussion" and shows a single post from a group of 050 members. The post was started by a user on 27 Dec 2023, with the last post also on 27 Dec 2023 and 0 replies. The post content is "Launch and 1st meeting Google Meet link". A green arrow points from the number 050 to the "Group" column header. A green box highlights the post content, and a green arrow points from this box to the post content itself.

Now, you are to go and meet your mentors.

1. Click on the mentor forum.
2. Your mentors have posted a message in the forum, with a **Google Meet** link for you to meet them and your group today.
3. Find your meeting link message in the mentor forum.
 - **If you don't see a message in the forum to your group, then please stay on this Zoom call.**
4. Click on the discussion title



Time to meet your mentors

The screenshot shows the STEM SMART Moodle interface. At the top, there is a navigation bar with the STEM SMART logo, a search icon, a bell icon, and a student status indicator. Below the navigation bar, the page title is "SMART2024P1 / Mentor Forum / Launch and 1st meeting Google Meet link". The main content area has a heading "Mentor Forum" and a sub-heading "Launch and 1st meeting Google Meet link". There is a dropdown menu for "Display replies in nested form" and a "Settings" button. A red callout box contains the text: "This is a question and answer forum. To see other replies, you must first post your reply." Below this, a discussion thread is shown with a message from a user named "Launch and 1st meeting Google Meet link" posted on "Wednesday, 27 December 2023, 10:10 PM". The message content is: "Here's the link for the mentor meeting in the launch event on the 6th of January! (12:15 to 13:00)" and "Here's the link for the 1st mentor meeting on the 13th January. (3-4pm)". There are "Permalink" and "Reply" buttons at the bottom of the message.

Now, you are to go and meet your mentors.

1. Click on the mentor forum.
2. Your mentors have posted a message in the forum, with a **Google Meet** link for you to meet them and your group today.
3. Find your meeting link message in the mentor forum.
 - **If you don't see a message in the forum to your group, then please stay on this Zoom call.**
4. Click on the discussion title
5. Then click on the link in the message (before leaving Zoom)
6. Leave this Zoom call **once you have confirmed that the link works.**
7. Once your mentor meeting is finished that is the end of today's launch and you are free to go.