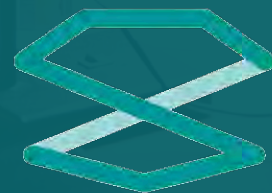


**Dr Lisa Jardine-Wright**  
Joint Director of STEM SMART  
Director of Isaac Physics

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



**STEMSMART**

An Initiative from the University of Cambridge



9:15 -9:30

Joining session



# Welcome – get ready to start!

**1. PLEASE RENAME YOURSELF IN ZOOM** to have your **group number** at the **beginning**

E.g. **43 Minnie Mouse**

## 2. OPEN THE MOODLE COURSE

- Go to [outreach.cao.cam.ac.uk](https://outreach.cao.cam.ac.uk) and login using the details that were emailed to you.
- If you think your password does not work click on “forgotten my username or password”.
- Your **username** is the **email address** that you registered for STEM SMART.
- Click on the “Launch: 7 Jan” box

## 3. LOGIN TO ISAAC PHYSICS

- Go to [isaacphysics.org](https://isaacphysics.org) and login.
- You **MUST** use the same login **EVERY** time you login to isaacphysics.
- If you think you have 2 accounts on Isaac Physics then please email [stemsmart@isaacphysics.org](mailto:stemsmart@isaacphysics.org) and tell us **WHICH account** you want us **to delete**.

## 4. GET EQUIPPED

Make sure you have with you **now**

- Notebook or paper
- Pens, pencils, ruler
- Scientific calculator





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

Reminder that 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.



# 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**

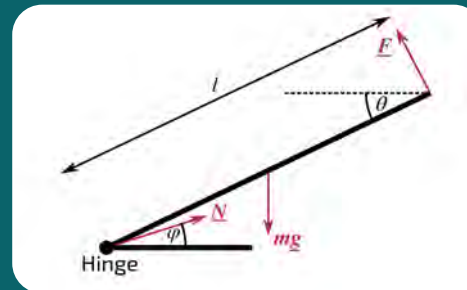
Continued engagement with the programme over 17-months will demonstrate a commitment to succeed which is viewed positively by employers and universities.

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



# How does it work?

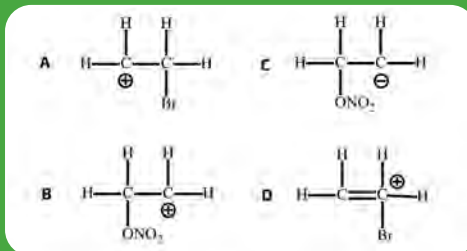
**Phase 1: Consolidating knowledge and building problem-solving skills**



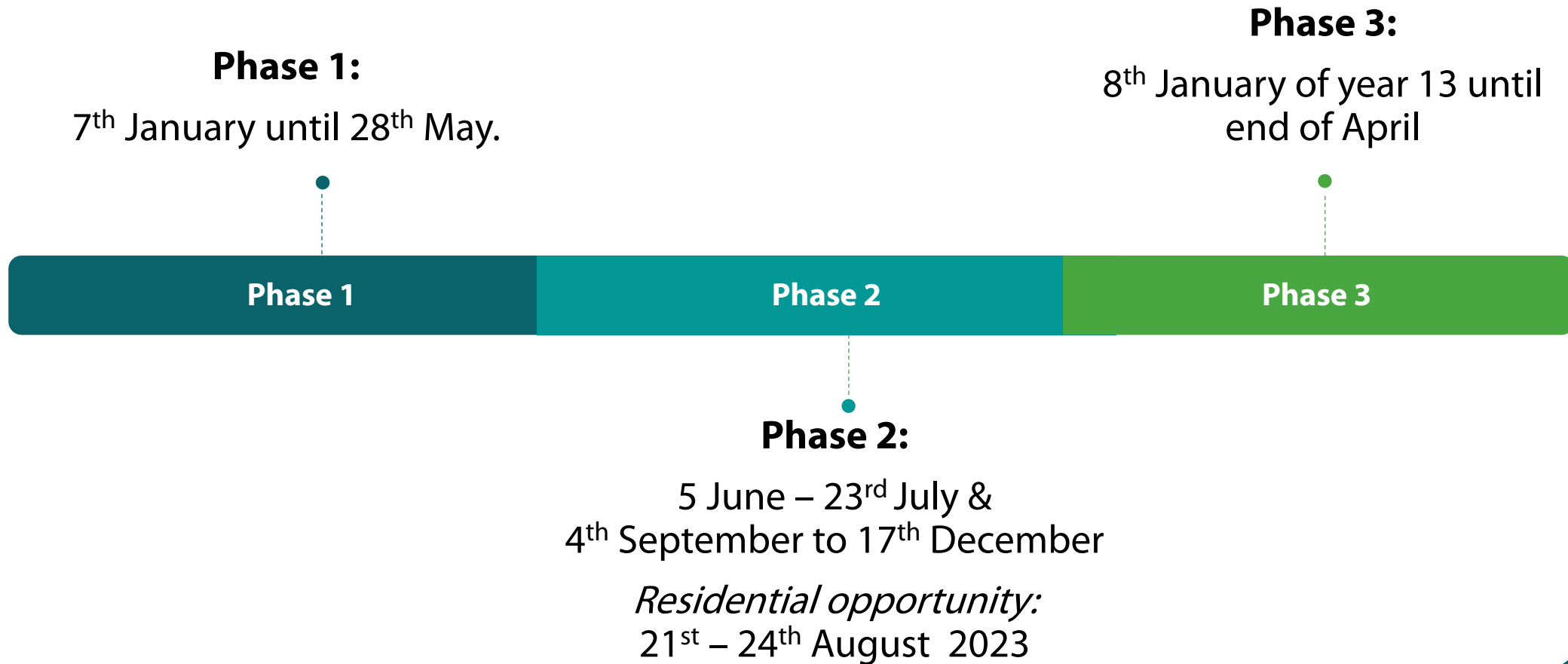
**Phase 2: Preparing for application to competitive universities**



**Phase 3: Securing strong examination performance and achievement**



# How does it work? Timeline





# How does it work? Academic Plan

## WEEKLY ASSIGNMENTS

**2-4 hours per week**



1 hour per subject per week  
For each subject studied at  
school

## WEEKLY TUTORIALS

**1-2.5 hours per week**



1 hour maths  
 $\frac{1}{2}$  hour physics, chemistry &  
biology

## MENTORING

**1 hour per fortnight**



**Phase 1 only**








## Welcome & Introductions Using Moodle & Isaac Physics

Subject homework will be set through Isaac Physics and you will answer the questions online. Isaac will provide you with instant customised feedback for your answers as well as providing hints to help you get started on questions. Using Isaac will also enable you to record your progress, and your tutors can review that progress to tailor their support to you.

### Please follow these steps:

1. Make sure that you have logged in to Isaac Physics.
2. If you have not already done so, join the Isaac Physics tutor groups for each of your subjects by clicking on the links below that are relevant to the subjects that you study. You should only join **ONE** maths group (either **SINGLE** or **DOUBLE**).

-  Join the physics tutor group
-  Join the chemistry tutor group
-  Join the biology tutor group
-  Join the single maths tutor group (maths)
-  Join the double maths tutor group (maths & further maths)

You will be asked to share your data with your tutors. You **must** click **OK** - this will just share with them (and only them) your name and your question progress.

### Isaac Physics features:

During the launch day we will also show you how to use features on Isaac such as the maths and chemistry equation editors (demonstrated in the video below) and the appropriate use of **significant figures**.



### Free supporting books:

If your internet is not reliable, you may find it helpful to have copies of our books. You can **request free copies using this form**.

# First steps: What do I need to do?

- Make sure you are logged into [outreach.cao.cam.ac.uk](https://outreach.cao.cam.ac.uk)
- Click on Launch: 7 Jan
- Scroll to "Welcome & Introductions"
- Join all relevant Isaac Physics groups – only join **ONE maths group** either single maths **OR** double maths
- Watch the video (1.5 mins) and read the remainder of this section.





## What is STEM SMART?

SMART stands for **S**ubject **M**astery and **A**ttainment **R**aising **T**uition. 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.

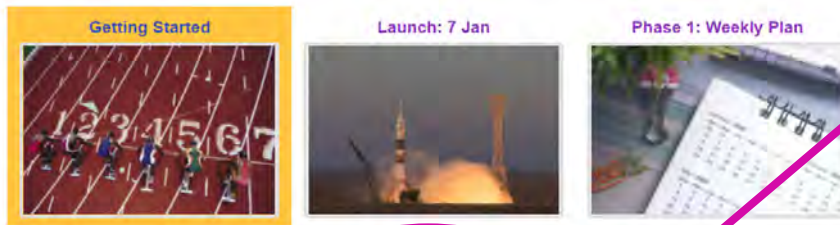
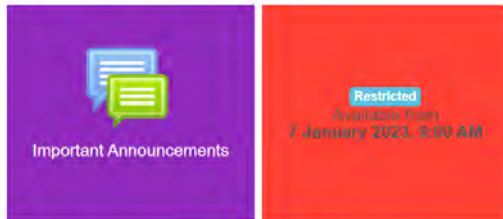


The course is structured in 3 phases:

- Phase 1 (P1): Jan 2023 - May 2023
- Phase 2 (P2): Jun 2023 - Dec 2023  
(optional 4 day residential in Cambridge, 21 - 24 August)
- Phase 3 (P3): Jan 2024 - May 2024



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



## Each week: What do I need to do?









- Login to [outreach.cao.cam.ac.uk](https://outreach.cao.cam.ac.uk)
- Click on the new week that has appeared.
- Each week will appear on the **Saturday** before the Monday which is the start.

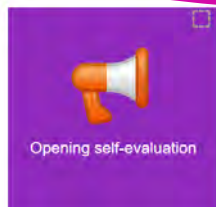


## Week 1: 9th Jan

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	 Tip of the Week	 Single Maths	 Double Maths	 Physics	 Chemistry	 Biology	 Tutorials	 Mentoring
Week 1: 9th Jan	How to get started on a question	Algebra & indices	Algebra, indices & matrices	Charge flow	Atomic structure	Cell structure 1	Subject tutorials	Getting to know you



### 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 a name to use for this session (optional)

Next



Tip of the week: **How to get started on a question** ☐

# Each week: What do I need to do?

- Work through the page – starting at the top and work through each section and activity.
  - For the subject activities you should attempt those that you are studying at school.
- The links at the top allow you to jump to the section you want to look at.














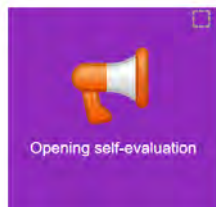
## Week 1: 9th Jan

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	 Tip of the Week	 Single Maths	 Double Maths	 Physics	 Chemistry	 Biology	 Tutorials	 Mentoring
Week 1: 9th Jan	<a href="#">How to get started on a question</a>	<a href="#">Algebra &amp; indices</a>	<a href="#">Algebra, indices &amp; matrices</a>	<a href="#">Charge flow</a>	<a href="#">Atomic structure</a>	<a href="#">Cell structure 1</a>	<a href="#">Subject tutorials</a>	<a href="#">Getting to know you</a>

Your progress 



### 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 a name to use for this session (optional)

Next



Tip of the week: **How to get started on a question**

# Each week: Tutorials

- **Attempt** as many assignments questions for each subject, each week, before your tutorial.
- **If** your tutorial is on Monday or Tuesday, at the start of a week, then you may not have had time to look at all the questions. In this case **read through** all of the questions and note down which ones you are least sure about.
- Use this text box on Moodle to ask your tutors questions or to tell them which questions you would most like to go through.
  - Only tutors see these messages and you can message anonymously if you wish.
  - This box appears at the top of **EVERY** week.
- **Tutorials will NOT be recorded**



# Additional opportunities: Recognizing students' efforts

- **Key point:** This is **YOUR** programme – you should do as much as you feel comfortable and able to do.
  - How ever much of the programme you do will help you in your studies
  - The programme is about trying not about getting everything correct.
  - Be kind to yourself
  - Any concerns at any point email [stemsmart@isaacphysics.org](mailto:stemsmart@isaacphysics.org)
- Students who are **most engaged in Phase 1 (between January and May)** will be **offered** additional opportunities in Phase 2.
  - A residential in Cambridge from 21<sup>st</sup> – 24<sup>th</sup> August 2023 (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 2 optional lectures attended.



9:50 -10:00

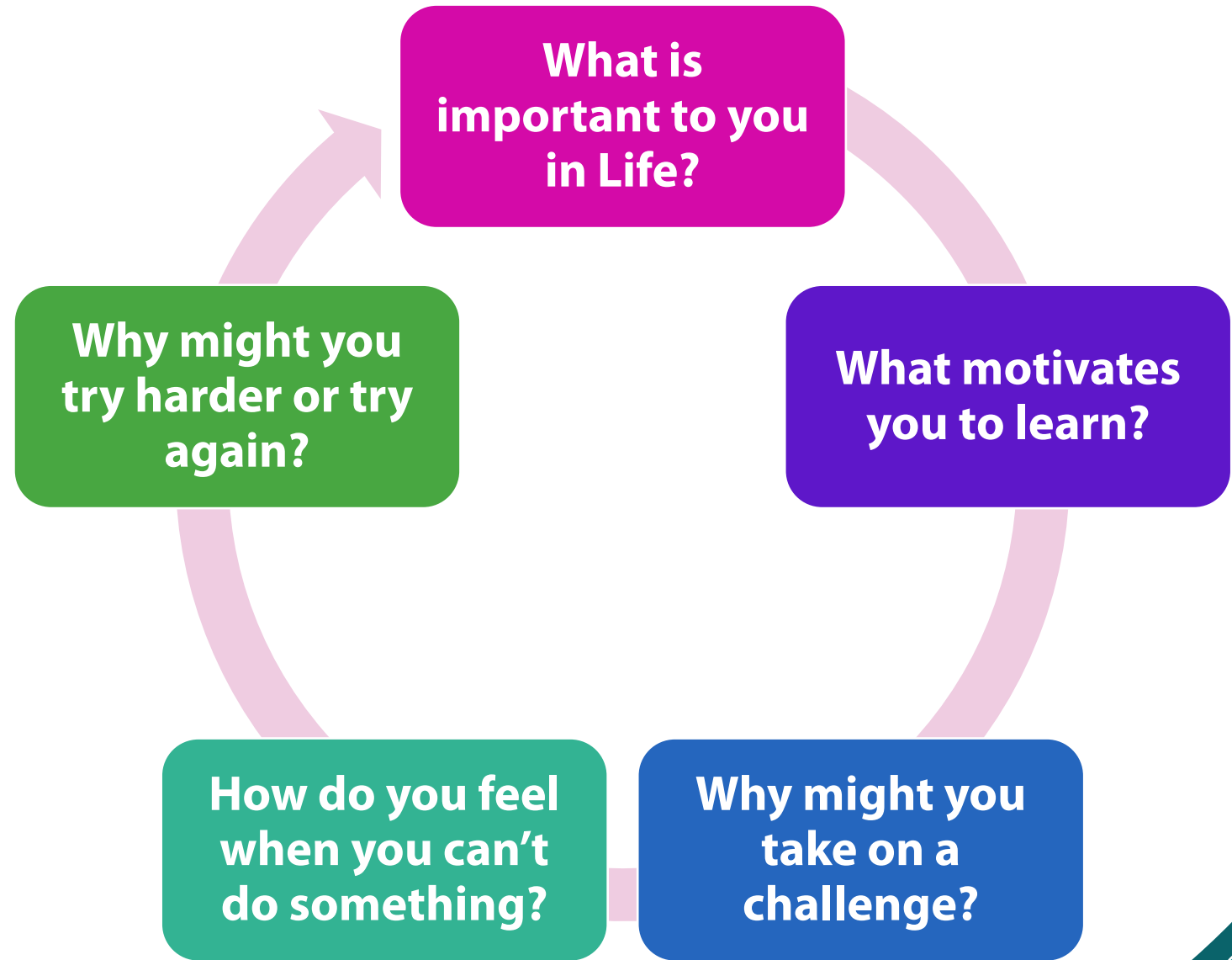
Goals and Core Values



**What do you value?**

**What do you want to achieve?**

**Why is learning important to you?**





10:00 -10:45

Week 1: Mathematics



# Week 1 Mathematics: Aims of this session

1. Register for tutorials on Zoom
2. Get started on your maths work for week 1 (which starts on Monday)
3. Understand how your tutorials will work and how they will be structured.



## Maths Session

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 register with Zoom for your weekly maths tutorials. You will only need to do this once!

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

### Single Maths

6-7pm Mondays  
(start 9th Jan)

7-8pm Thursdays  
(start 12th Jan)

### Double Maths

5:30-6:30pm Tuesdays  
(start 10th Jan)

6:30-7:30pm Wednesdays  
(start 11th Jan)



# Week 1: Mathematics

1. Scroll down to the Maths Session Section on the Launch page
2. Register on Zoom for your chosen tutorial time - **either** single maths **OR** double maths.
  - i. You will be emailed your own personal Zoom link
  - ii. Use the same link every week.



# Week 1: Mathematics

## Getting started on your week 1 maths work.

1. Click on “Week 1: 9<sup>th</sup> Jan” in the left hand menu – this will take you to the Week 1 course page.





## Week 1: 9th 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	Tip of the Week	Single Maths	Double Maths	Physics	Chemistry	Biology	Tutorials	Mentoring
Week 1: 9th Jan	<a href="#">How to get started on a question</a>	<a href="#">Algebra &amp; Indices</a>	<a href="#">Algebra, indices &amp; matrices</a>	<a href="#">Particle flow</a>	<a href="#">Atomic structure</a>	<a href="#">Cell structure 1</a>	<a href="#">Subject tutorials</a>	<a href="#">Getting to know you</a>

### 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 or an anonymous comment or query using the [text box at the](#)

### Double Maths: Algebra, Indices & Matrices ☐

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.

We will then look at matrices and how to perform arithmetic with them. We will also study matrix multiplication and how to find an inverse matrix. If you have not had the opportunity to study matrices yet in your school or college, do make sure to look at the videos and summary notes below.

#### This week's assignment

[STEM SMART Double Maths 1 - Algebra, Indices & Matrices](#)

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

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](#).

# Week 1: Mathematics

## Getting started on your week 1 maths work.

1. Use the links at the top to jump to the sections of interest – here either single maths or double maths.
2. Click on the purple button / link to go to the assignment (list of questions) on Isaac Physics
3. Have a go at the questions, writing down your method and solution in your notebook.
4. Use the Zoom poll to vote for which of the first four questions you would like to discuss.
5. **At 10:25** – We will go through main points of top 2 most voted for questions.



# 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 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.



11:00 -11:15

Breaktime **BUT** one quick request...





11:00 -11:30

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: Get organised

Get set for STEM SMART

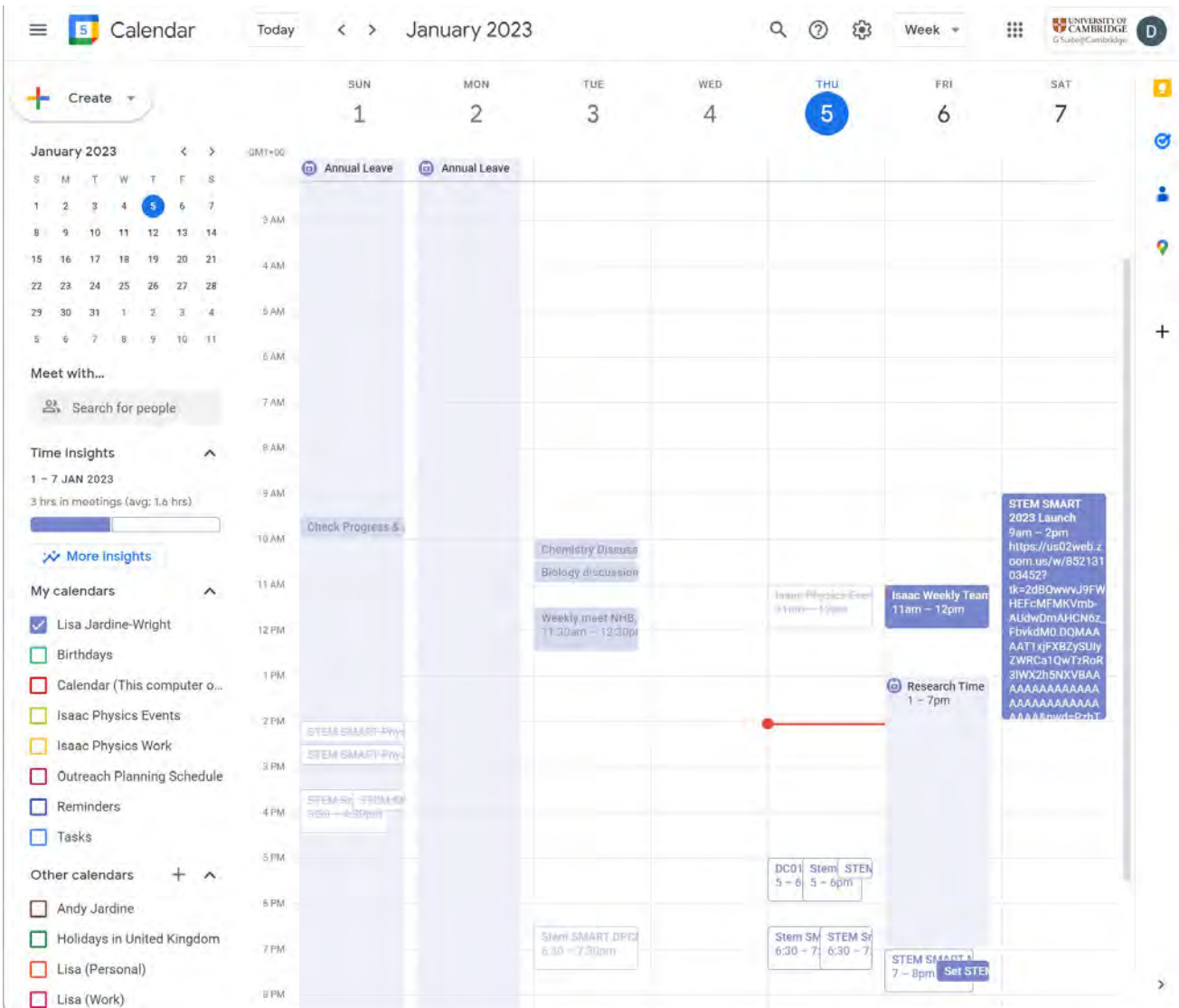


1. Scroll down to the Get set for STEM SMART Section on the Launch page
2. Watch the 2 minute video.
3. Click on the small square to mark that you have finished this activity.



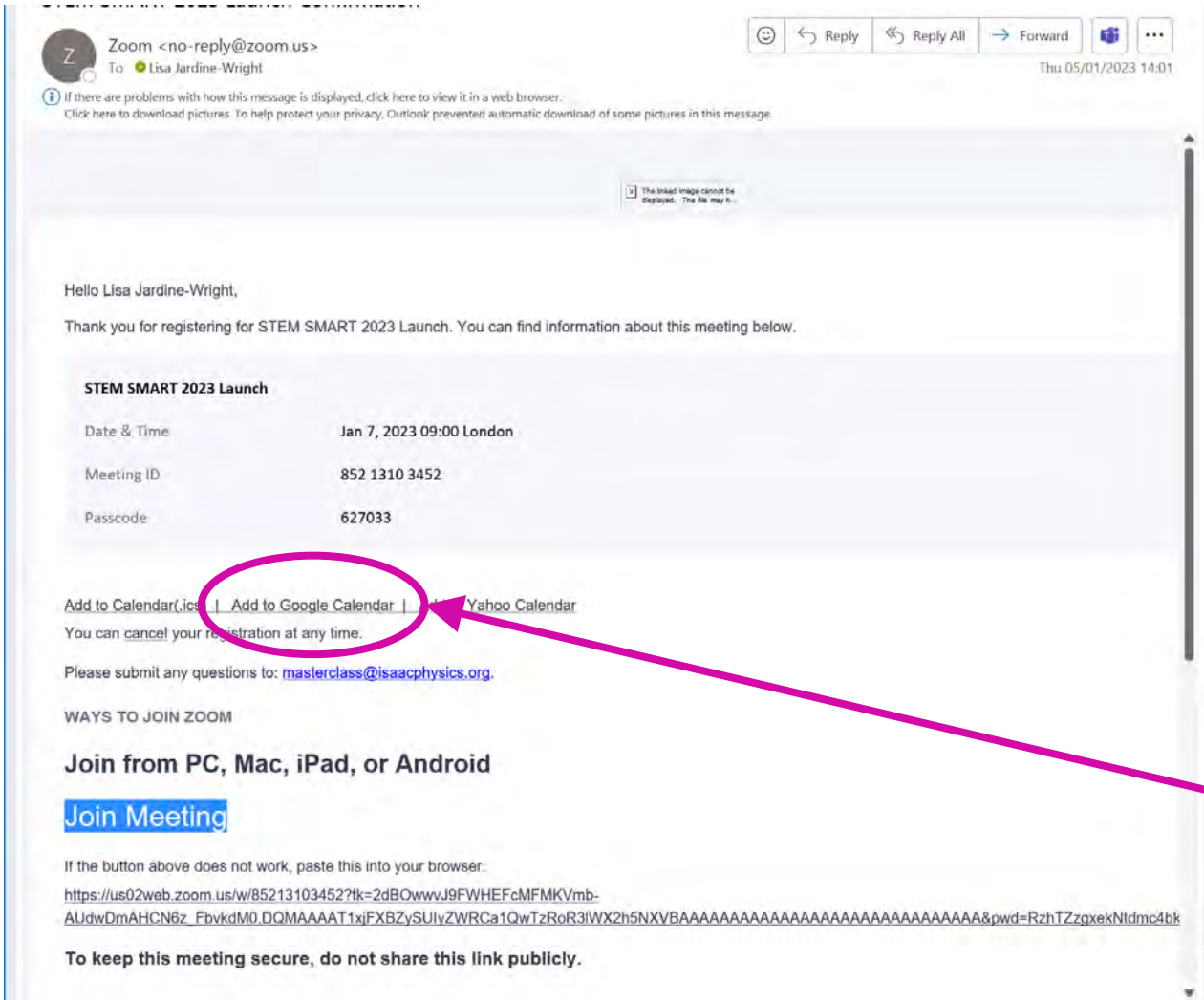
# Get set for STEM SMART: Using Google Calendar

1. Go to [calendar.google.com](https://calendar.google.com)
2. Login with your google account (if you have one) or create a google account.



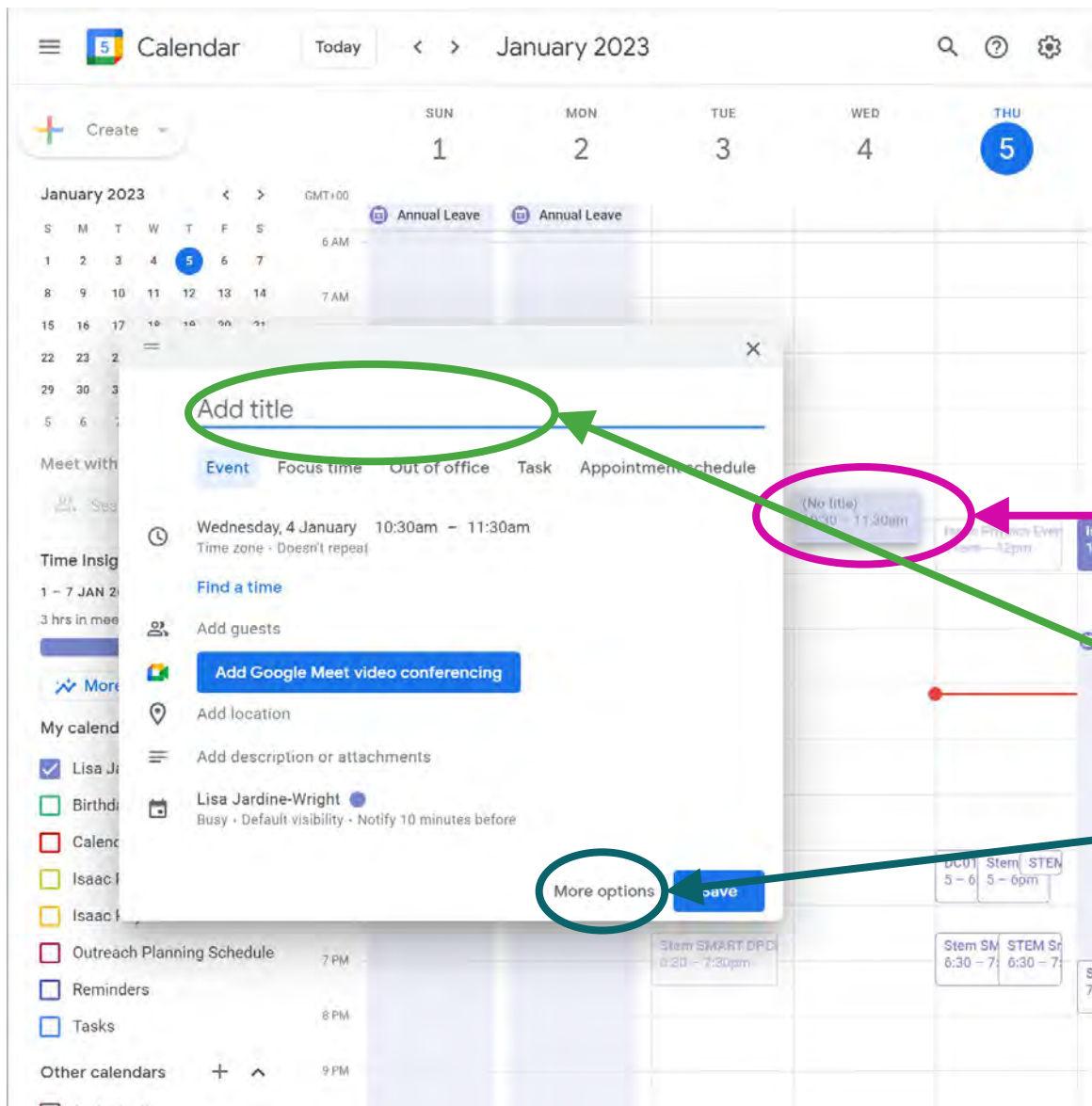
# Get set for STEM SMART: Using Google Calendar

1. You can now add all of your tutorial times to your calendar in 2 clicks.
2. Go to the individual emails that Zoom has sent to you
3. Click on "Add to Google Calendar"







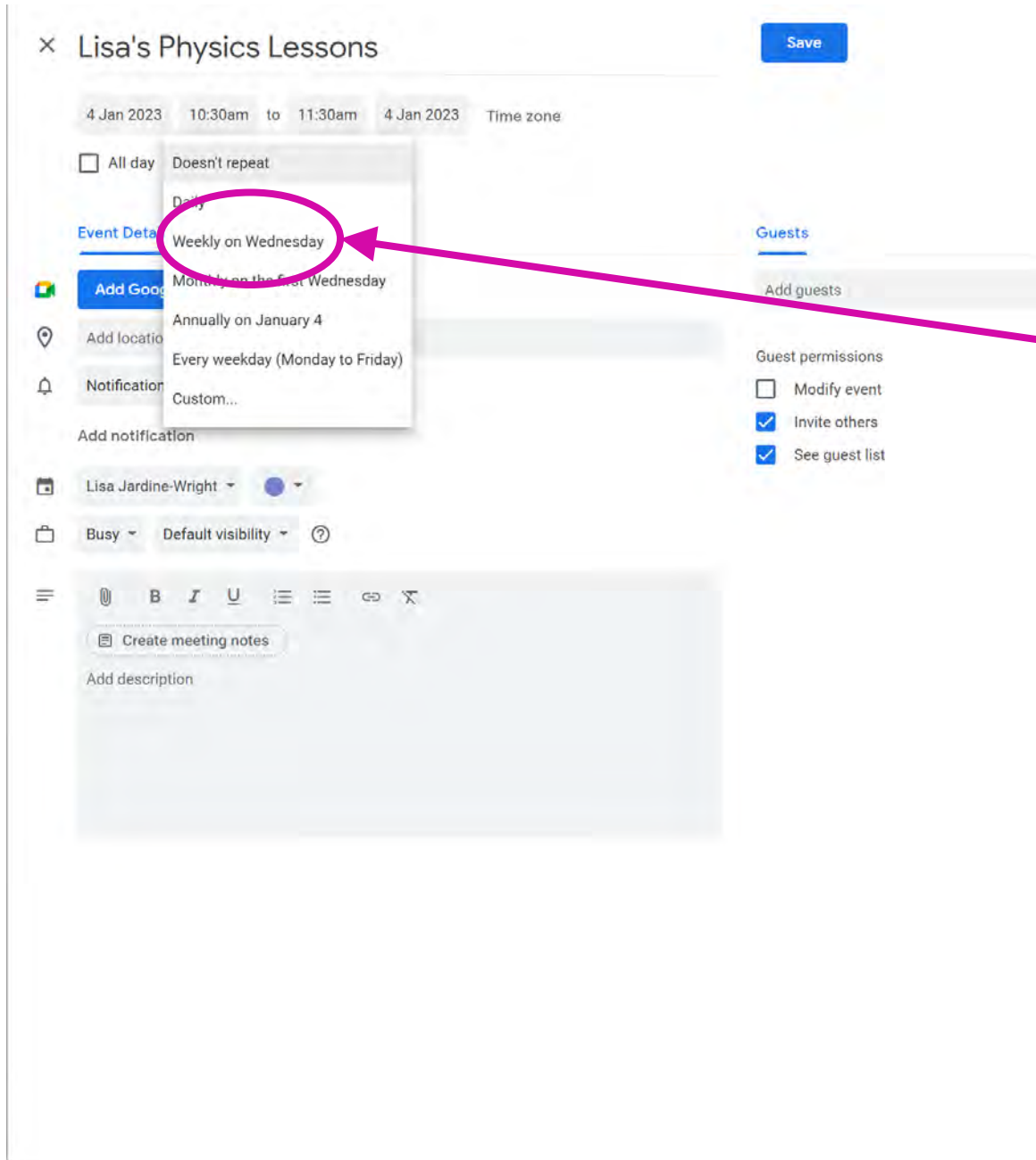


# Get set for STEM SMART: Using Google Calendar

To add your own lessons, meetings, activities... to your calendar.

1. Click on the day and time they occur.
2. Type a title / give it a name
3. Click on "more options" to repeat this event over multiple days or weeks.





# Get set for STEM SMART: Using Google Calendar

1. Choose how often the event happens.
2. You can customise this by clicking on "Custom".



## × Lisa's Physics Lessons

4 Jan 2023 10:30am to 11:30am 4 Jan 2023 Time zone

☐ All day Custom...

Event Details Find a Time

Guests

Add Google Meet video conferencing

Add guests

Add location

Notification 10 minutes X

Add notification

Lisa Jardine-Wright

Busy Default visibility

Create meeting notes

Add description

Save

### Custom recurrence

Repeat every 1 week

Repeat on

Ends

☐ Never

☐ On 5 Apr 2023

☒ After 27 occurrences

Cancel

Done

# Get set for STEM SMART: Using Google Calendar

1. My physics lessons are going to happen at 10:30 – 11:30am every Monday, Wednesday and Friday for 9 weeks (9 x 3 = 27 occurrences)
2. Click Done
3. Then click Save when you are finished.





11:30 -12:15

Week 1: Physics / Chemistry / Biology



# Week 1 Physics / Chemistry / Biology:

## Aims of this session

1. Register for tutorials on Zoom **for all subjects that you study at school.**
  - Add the details to your calendar
2. Get started on each assignment for week 1 (which starts on Monday)
3. Do at least one question from each assignment for each subject that you study. Starting with Physics, then Chemistry, then Biology.



## Physics, Chemistry & Biology Session

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

If you are studying (or have studied) two or more of physics, chemistry and biology then start with the first question on the physics assignment and then move on to the first question on the chemistry assignment or start with chemistry and then move on to the first question in biology etc.

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.

Now is also a good opportunity to make sure you register with Zoom for your weekly physics, chemistry and/or biology tutorials. You will only need to do this once!

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



Physics

5-5:30pm Tuesdays

(start 10th Jan)

6:15-6:45pm Thursdays

(start 12th Jan)



Chemistry

7-7:30pm Tuesdays

(start 10th Jan)

5:30-6pm Thursdays

(start 12th Jan)



Biology

7-7:30pm Mondays

(start 9th Jan)

5-5:30pm Wednesdays

(start 11th Jan)

# Week 1: Physics/Chemistry /Biology

1. Go to Moodle "Launch: 7 Jan" page
2. Scroll to [Physics / Chemistry / Biology Section](#)
3. Register on Zoom for your chosen tutorial time in each subject you study at school.
  - i. You will be emailed your own personal Zoom link.
  - ii. Use the same link every week.



# Week 1 Physics / Chemistry / Biology:

## Session plan

1. 10 mins to have a go at the questions
  - 1<sup>st</sup> physics question, 1<sup>st</sup> chemistry question, 1<sup>st</sup> biology,
  - 2<sup>nd</sup> physics, 2<sup>nd</sup> chemistry, 2<sup>nd</sup> biology....
2. 10 mins Physics tutorial example
3. 10 mins Chemistry tutorial example
4. 10 mins Biology tutorial example





SMART2023P1

- Participants
- Badges
- Competencies
- Grades
  - What is STEM SMART?
  - Getting Started
  - Launch: 7 Jan
  - Phase 1: Weekly Plan
  - Week 1: 9th Jan**
- Home
- Dashboard
- Calendar

## Physics, Chemistry & Biology Session

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

If you are studying (or have studied) two or more of physics, chemistry and biology then start with the first question on the physics assignment and then move on to the first question on the chemistry assignment or start with chemistry and then move on to the first question in biology etc.

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.

Now is also a good opportunity to make sure you register with Zoom for your weekly physics, chemistry and/or biology tutorials. You will only need to do this once!

Please click on any tutorial time to register for the week, online tutorials on Zoom

# Week 1: Physics/Chemistry /Biology Getting started on your week 1 work.

1. Click on "Week 1: 9<sup>th</sup> Jan" in the left hand menu – this will take you to the Week 1 course page.

UNIVERSITY OF CAMBRIDGE

ONLINE PORTAL USER AGREEMENT TERMS OF USE PRIVACY POLICY

Home / My courses / SMART2023P1 / Week 1: 9th Jan

## STEM SMART 2023 Phase 1

### 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:

- Phase 1 (P1): Jan 2023 - May 2023
- Phase 2 (P2): Jun 2023 - Dec 2023









Getting Started Phase 1: Strengthening Subject Phase 2: Applying to Phase 3: Preparing for Success!



## Week 1: 9th 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	 Tip of the Week	 Single Maths	 Double Maths	 Physics	 Chemistry	 Biology	 Tutorials	 Mentoring
Week 1: 9th Jan	<a href="#">How to get started on a question</a>	<a href="#">Algebra &amp; indices</a>	<a href="#">Algebra, indices &amp; matrices</a>	<a href="#">Charge flow</a>	<a href="#">Atomic structure</a>	<a href="#">Cell structure 1</a>	<a href="#">Project tutorials</a>	<a href="#">Getting to know you</a>



### Physics: Charge flow

Electrical circuits are all about charge and how it flows. This week we look at charge flow (current) and how a current in amps relates to the number of electrons or ions moving.

#### This week's assignment

**STEM SMART Physics 1 - Charge Flow**

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



### Biology: Cell Structure 1

The first two weeks of this course are all about cell structure. This week you will learn about the differences in cell structure between groups of organisms, and learn about the nucleus, cytoplasm, cell membrane, mitochondria, and chloroplasts. You will also learn about different types of microscopy.

#### This week's assignment

**STEM SMART Biology 1 - Cell Structure 1**

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



### Chemistry: Atomic Structure

In this first week, we will look at atomic structure configurations, and how they are related to the:

#### This week's assignment

**STEM SMART Chemistry 1 - Atomic Structure**

# Week 1: Physics/Chemistry /Biology

## Getting started on your week 1 work.

1. Use the links at the top to jump to the relevant sections.
2. Click on the purple button / link to go to the assignment (list of questions) on Isaac Physics
3. Have a go at the questions, writing down your method and solution in your notebook.
4. Use the Zoom poll to vote for which of the first three questions you would like to discuss.
5. **At 11:48** – Physics,  
**11:58** - Chemistry,  
**12:08** - Biology



# 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 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.





12:15 -12:45

Meet your mentors and your group





# Meet your mentors: Aims of this session

1. Meet your 2 or 3 mentors – students at the university 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 are not there to answer questions about your subject assignments – if you are stuck on a question then use the text box to message the tutors (you can do this anonymously).
2. Mentors will confirm when and how you will meet. For example,
  - When the meetings will start
  - You will need to go on Moodle to find the link



# STEM SMART 2023 Phase 1

## What is STEM SMART?

SMART stands for **S**ubject **M**astery and **A**ttainment **R**aising **T**uition. 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.

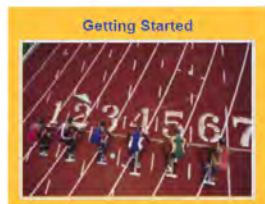
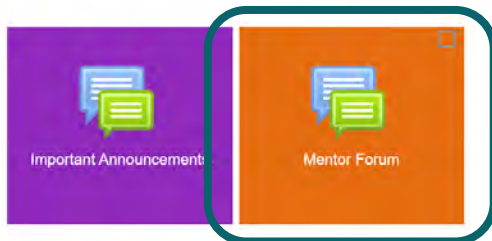


The course is structured in 3 phases:

- Phase 1 (P1): Jan 2023 - May 2023
- Phase 2 (P2): Jun 2023 - Dec 2023  
(optional 4 day residential in Cambridge, 21 - 24 August)
- Phase 3 (P3): Jan 2024 - May 2024



Each Monday, at the 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: Communicating

1. Your mentors will communicate with you using this “forum” at the top of the Moodle course.
2. Click on the words “Mentor Forum” – clicking on the square anywhere else will **NOT** work.



# STEM SMART 2023 Phase 1

## Mentor Forum



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.

Separate groups: 43

This is a question and answer forum. In order to see other responses to these questions, you must first post your answer



Discussion	Started by	Group	Replies	Last post
Meet your group - introduce yourself	Lisa Jardine-Wright	43	0	Lisa Jardine-Wright Thu, 5 Jan 2023, 3:46 PM

# Meet your mentors:









1. You should see an example message from me – click on the discussion title “Meet your group – introduce yourself” and you should be able to reply to the message.
  - Only your group (mentors and students) will see your message.
  - You will only see the discussions within your own group – no other group’s discussions.
2. You can only see other people’s replies or comments when you have posted something yourself.
3. Your mentors will post a message here with the date and meeting link for your first mentor discussion.




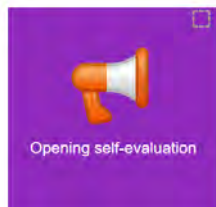
## Week 1: 9th Jan

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	 Tip of the Week	 Single Maths	 Double Maths	 Physics	 Chemistry	 Biology	 Tutorials	 Mentoring
Week 1: 9th Jan	<a href="#">How to get started on a question</a>	<a href="#">Algebra &amp; indices</a>	<a href="#">Algebra, indices &amp; matrices</a>	<a href="#">Charge flow</a>	<a href="#">Atomic structure</a>	<a href="#">Cell structure 1</a>	<a href="#">Subject tutorials</a>	<a href="#">Getting to know you</a>

Your progress 



### 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 a name to use for this session (optional)

Next



Tip of the week: **How to get started on a question** ☐

# Round-up & next steps

1. Logon to Moodle and read through **Getting started**, and the **Launch** page.
2. Make sure that you have in your calendar all of your tutorial times and your mentor meeting times.
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 in to Isaac Physics 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](mailto:stemsmart@isaacphysics.org)

