

CURRICULUM, PEDAGOGY AND BEYOND



THE MATHEMATICAL
ASSOCIATION OF VICTORIA

MAV24
CONFERENCE

How to use DESOS activity builder as a formative assessment tool

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Event App



App Download Instructions

Step 1: Download the App 'Arinex One' from the App Store or Google Play



App Store



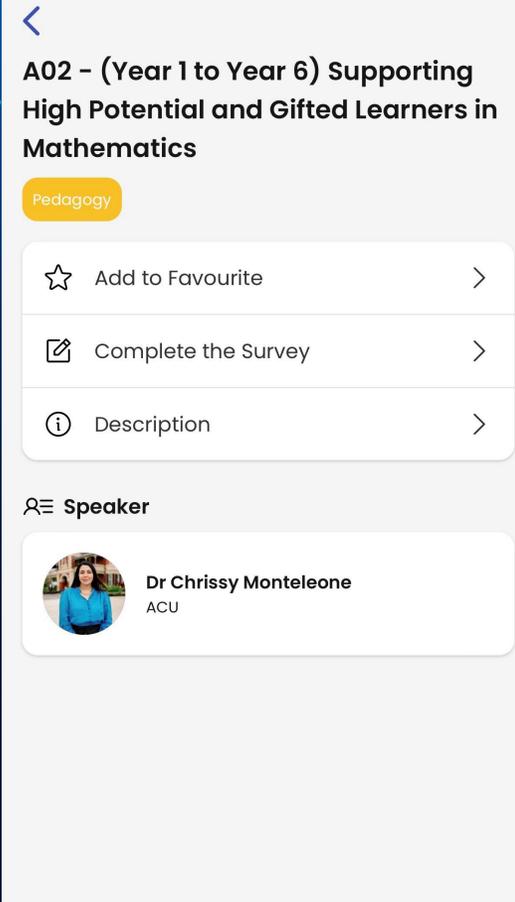
Google Play

Step 2: Enter Event Code: **mav**

Step 3: Enter the email you registered with

Step 4: Enter the Passcode you receive via email and click 'Verify'. Please be sure to check your Junk Mail for the email, or see the Registration Desk if you require further assistance.

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Pedagogy

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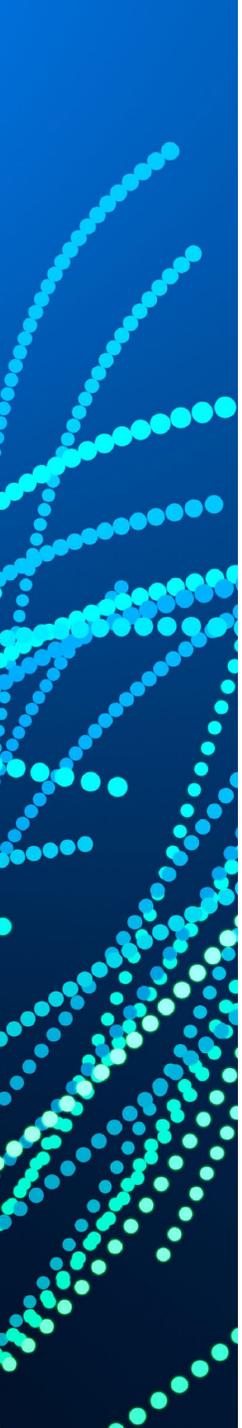
☰ Speaker

 **Dr Chrissy Monteleone**
ACU



Acknowledgement of the country

We'd like to start by acknowledging the traditional owners of the land on which we meet today.



Our aims for today

- Set up a teacher account
- How to add a class
- How to create an activity with multiple pages and components
- How to assign an activity to a class
- Understand how to complete a DESMOS activity from student's perspective
- How to navigate through student dashboard
- How to provide feedback on student work
- How to set up self correction (not the main focus - coding)

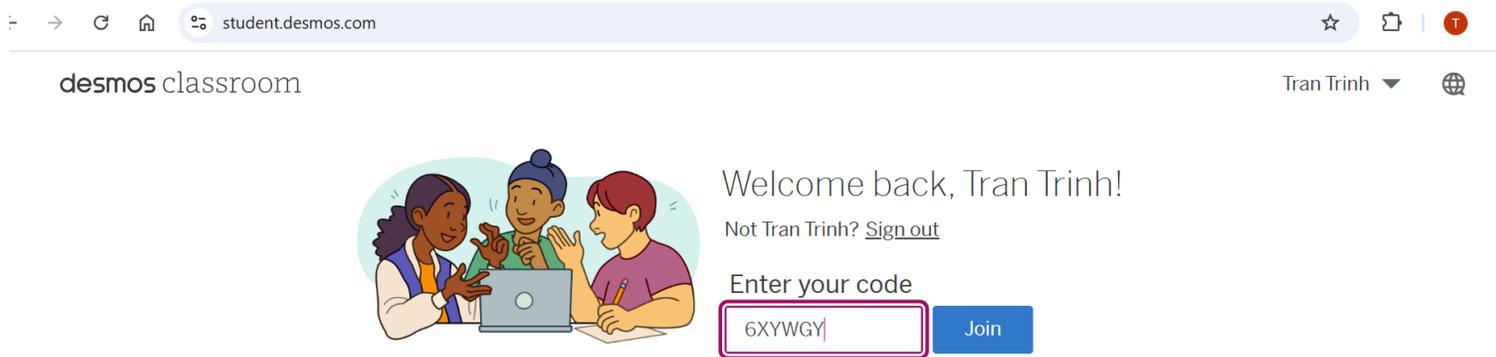


Teacher account

<https://teacher.desmos.com/>

Warm-up activity

Warm up activity MAV



The screenshot shows a web browser window with the address bar displaying "student.desmos.com". The page title is "desmos classroom". In the top right corner, the user's name "Tran Trinh" is shown next to a dropdown arrow and a globe icon. The main content area features an illustration of three diverse students (two girls and one boy) gathered around a laptop, looking at the screen. To the right of the illustration, the text reads "Welcome back, Tran Trinh!". Below this, there is a link "Not Tran Trinh? Sign out". Underneath, it says "Enter your code" followed by a text input field containing "6XYWGY" and a blue "Join" button.

Reflection:

What type of questions would you like to see that have not been included already?

Would you see yourself using DESMOS activities like this in your Maths class?

How to copy and edit an activity

desmos classroom

Home



MAV

By Tran

Last published by you an hour ago.

Mobile Tablet Laptop

Teacher Guide

+

⋮

- Edit your activity
- Manage editors
- Share activity
- Copy and edit
- Delete your activity

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Your Assignments

CLASS

STUDENTS

DATE

Dashboards below are for earlier versions of this activity.

MAV

1 of 1

Dec 4, 2024
at 12:56 pm

Teach

⋮

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Amplify Desmos Math

Screens

Preview

YOUR STUFF

Dashboard History

Classes

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1 Question 1

Which school are you from?



2 Question 2

Please identify the mistake in the picture on



3 Question 3

Who was the first person to orbit the Earth?



4 Question 4

Which of the following politicians won a nobel prize in literature?



5 Question 5

Order the countries listed from smallest to largest by surface area.



How to create an activity

desmos classroom

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Create a New Activity

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Parabolas Open-ended Task 2

By James Lam Edited by You

Creation of parabolas that need to meet specific criteria.



Name your new activity



Share Settings

Anyone with the link can view

Only you can view

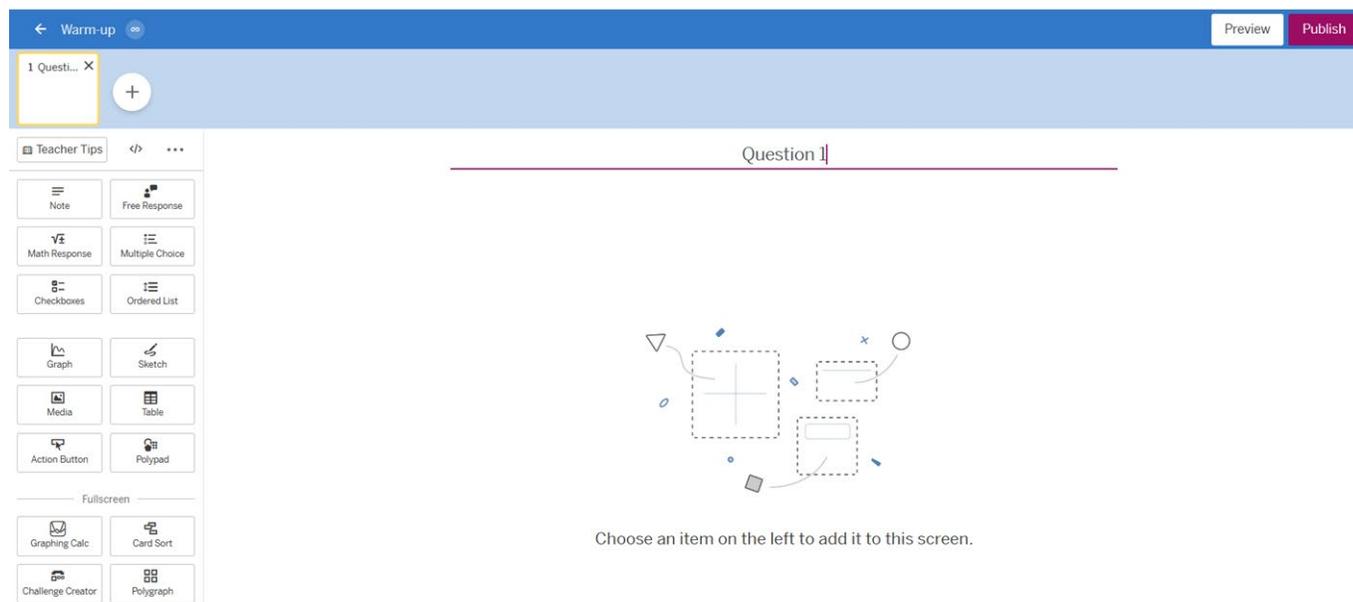
Activity Description

[Learn more about building activities](#)

Create New Activity

How to add components to an activity

- Open an activity that we've created
- Each slide can be used for one question. Various components (menu on the left) can be added to each slide
- Multiple slides can be added



The screenshot displays a user interface for editing a question. At the top, a blue header bar contains a back arrow, the text "Warm-up", a close icon, and two buttons labeled "Preview" and "Publish". Below the header, a light blue area shows a tab labeled "1 Quest..." with a plus sign icon to its right. The main workspace is divided into two sections. On the left is a vertical menu of component options, including "Teacher Tips", "Note", "Free Response", "Math Response", "Multiple Choice", "Checkboxes", "Ordered List", "Graph", "Sketch", "Media", "Table", "Action Button", "Polypad", and a "Fullscreen" section with "Graphing Calc", "Card Sort", "Challenge Creator", and "Polygraph". On the right is a question slide titled "Question 1" with a red horizontal line below the title. The slide content area contains a faint, dashed-line sketch of a question layout with various geometric shapes and lines. Below the slide, the text "Choose an item on the left to add it to this screen." is displayed.

Practice: Components on the warm-up activity

- Notes: Space for us to add a question including instructions, equations e.t.c
- Free response: Space for students to show their working out, type equations
- Multiple choice. Note that we can use checkbox which allows multiple answers instead.
- Ordered list
- Card sorts: Matching cards
- Media: Add images
- Tables of values
- Sketch: Space for students to hand draw graphs
- Graphing calculator: Add graphs, sliders
- Others



Sample activity

Area of composite shapes

Names are anonymized

How to create classes and assign activities

desmos classroom

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Manage Your Classes ?

Add New Class

● Manage classes

	CLASS NAME		INVITE CODE	CLASS ROSTER
11SMA	11SMA	Assigned activities	Inactive	24 students ⋮
12SMA	12SMA	Assigned activities	Inactive	14 students ⋮
9MATB	9MATB	Assigned activities	Inactive	26 students ⋮
9MATC	9MATC	Assigned activities	Inactive	26 students ⋮
MAV	MAV	Assigned activities	6XYWGY	0 students ⋮

×

Add New Class

Students will join your class by entering a code.

Class Name

Enter class name



Using Google Classroom? Log in with Google to import your classes. [Learn more](#)

Student dashboard

- Click on a class
- Go to 'assigned activities'
- Choose 'dashboard' for one of the activities
- Click on each student to see all the questions they've done or click on each question to see how all students are going

nonymized Pace Sync to Me Pause

1 Practic... 2 Practi... 3 Practi... 4 Practi... 5 Drag t...

ORT BY Time Entered

Anonymize mode is on. Your students' names have been changed to the names of notable mathematicians. [Learn more](#)

Screen 5 of 5

Drag the point to where you think your level of confidence is

Responses Overlay

Mariel Vázquez Florence Glanfield Erika Camacho Rochelle Gutierrez Kimberly Weems Wang Zhenyi

Emmy Noether Gertrude Blanch Ruth Gonzalez Autumn Kent Nkechi Agwu Rediet Abebe

Student feedback

Genevieve M. Knight	⋮	●
Abraham Nemeth	⋮	●
Alan Turing	⋮	●
Sofia Kovalevskaya	⋮	●
Emmy Noether	⋮	●
Jesse Wilkins Jr.	⋮	●
Madhava	⋮	●
Mary Somerville	⋮	●
Alicia Prieto Langarica	⋮	●
Carl Gauss	⋮	●
Grace Hopper	⋮	●
Nalini Joshi	⋮	●
Audrey Tang	⋮	●
Tasha Inniss	⋮	●
Daina Taimina	⋮	●
Maryam Mirzakhani	⋮	
Brahmagupta	⋮	

Please design pendants based on the given specifications

Open ended task

Maria is making pendants (jewellery). Her designs use triangular shapes. Each shape has an angle of 36° with the side opposite to this angle of a length of 4.2 cm. What could be lengths of the other sides of the pendants?

Hint: How many different types of triangles?

What you need to do on Desmos

1. Draw different triangles that you can think of. Label all the angles and lengths
2. For each triangle, show the calculations for angles and lengths

Hope you'll enjoy the process of designing!

example 1

example 2

example 3

Example 1 calculations:

$$O = 4.2 \text{ cm}$$

$$\sin(36^\circ) = \frac{4.2}{H}$$

$$= 4.2 \sin(36^\circ) = H$$

$$H = 7.14 \text{ cm}$$

$$\tan(36^\circ) = \frac{4.2}{A}$$



How to self correct answers

How to set up self correct answers

Coding



Questions?

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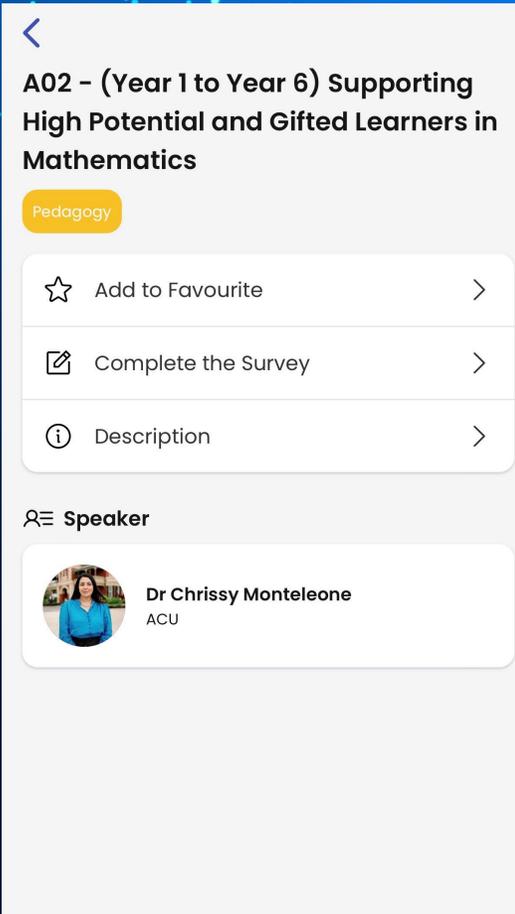
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