Computer Science

TRANSITION WORK

Data Representation Task 1: Watch

To begin with I would like you to watch a series of videos :

Video 1 : Units

Video 2: Converting between denary & binary

Video 3: Adding two 8 bit binary numbers

Video 4: Binary shifts

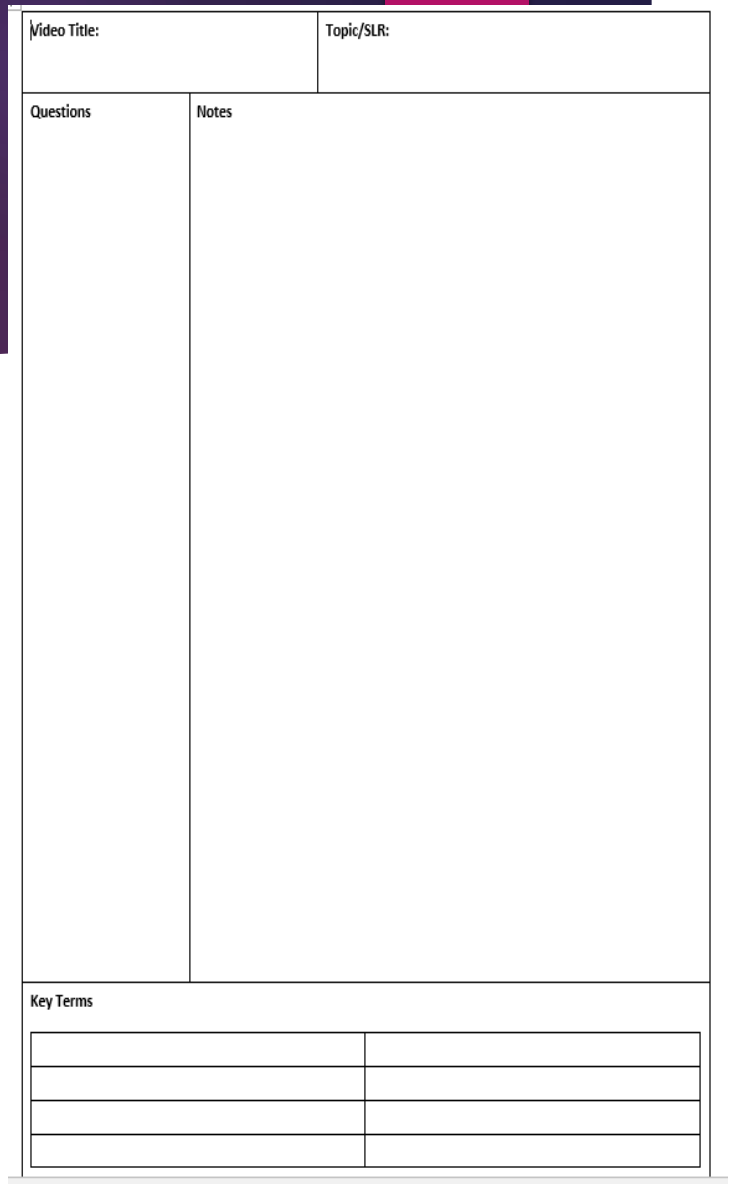
This will introduce you to the Denary and Binary number systems and how we can convert between them and add them together.

It is important to take in the information in the videos. Please watch them first and just concentrate on what is being said.

Data Representation: Task 2 Notes

- Next, watch the video again and using the Cornell Note Taking method (template included on our website page) or you can download from https://craigndave.org/product/cornell-note-taking-template/

- Take detailed notes on each video.
- This is part of the way that we work in A level. I want you to get used to using this template and structuring your notes this way.



Video Title:	Topic/SLR:
Questions	Notes
Key Terms	

Data Representation Task 3: Doing

- On the transition task website page under this slide I have attached three activities for you to complete to practice the techniques talked about and displayed in the videos.
- Please complete these activities.

Next steps…

I would like to get to know you and understand why you have chosen Computer Science. I would also like to set you an independent research task. This will help you to practice the note taking skills earlier and also understand how to put together a suitable response to a task.

Over the next few slides are the rest of the tasks that I would like you to complete.

“Tell me about yourself”

Craig’n’Dave

Why did you choose Computer Science?

Expected time to complete: ½ hour

In this simple task you get the opportunity to tell me your choices and reasons behind choosing to study Computer Science. Please answer all questions as best you can.

1. Why did you choose to study A level Computer Science?

2. What other courses have you chosen to study at Key Stage 5, and what made you choose this combination?

3. What are you hoping to achieve from studying Computer Science?

4. How would you describe yourself as a learner at GCSE? What skills where you good at, what areas would you like to improve on?

5. What are your other hobbies and interests outside of school? Anything related to Computing?

Independent research task

Craig'n'Dave

Emerging computer technology

Expected time to complete: 2 hours

In this task you get to investigate any area of emerging computer technology which interests you.

You can pick any area which interests you, but examples could be:

- Artificial intelligence
- Robotics
- Automated self driving cars
- Quantum computing

In no more than ONE side of A4 summarise the area you have chosen under the following four headings:

1. What is it?
2. What are the possible Social, Moral, Cultural and Ethical **benefits** of this technology on society
3. What are the possible Social, Moral, Cultural and Ethical **risks** of this technology on society
4. My conclusion on this technology and what it will mean for our world 10 years from now

Additional help:

For additional help and support in structuring your answer you might like to watch some of the videos from the following Craig 'n' Dave playlists:

OCR:
SLR 17 – Ethical, moral and cultural issues
https://student.craigndave.org/videos/slr-17-ethical-moral-and-cultural-issues

AQA:
SLR 19: Moral, social, legal, cultural issues
https://student.craigndave.org/videos/slr19-moral-social-legal-cultural-issues