WELCOME BACK!

BY THE END OF THIS LESSON YOU WILL BE ABLE TO ANSWER THE FOLLOWING QUESTIONS.

- Why didn't I get an A?
- What are letter grades?
- Why is your rank probably more important?
- How can I improve my marks/ranks/grades?
- How do I sign onto these computers?
- What are we going to do this semester?
- What is the assignment seclude?

WHY DIDN'T I GET AN A?

At the end of the day a raw score is converted to a letter grade by a simple formula.
The formula isn't entirely set in stone but in Technology the general gist is something like this

- 85%+ - 100%: A
- 70%+ - 84%: B
- 48%+ - 69%: C
- 25%+ - 48%: D
- lower than 25%: E
- Insubstantial effort: V
- Did not submit: V

HOW IS THAT MARK FORMULATED

Imagine that you scored the following from the following weighted assessments

1. Assignment 1: w35% s60%
2. Assignment 2: w15% s80%
3. Assignment 3: w35% s45%
4. Assignment 4: w15% s90%

Assignment weight	Score	Weighted score
35	60%	21
15	80%	12
35	45%	15.75
15	90%	13.5
	Total Score	**62.25**

WHAT ARE LETTER GRADES?

Achievement Standards Technologies T Course - Year 11

	*A student who achieves an **A** grade typically*	*A student who achieves a **B** grade typically*	*A student who achieves a **C** grade typically*
Knowledge and understanding	• critically analyses the design process and evaluates constraints and implications for decision making • synthesises technology theories, concepts and principles and evaluates the properties of materials or data or systems to address a need, problem or challenge • critically analyses technologies and evaluates ethical and sustainable application of technology • thinks critically and creatively, drawing on data and information to solve complex problems	• analyses the design process and explains constraints and implications for decision making • analyses technology theories, concepts and principles and explains the properties of materials or data or systems to address a need, problem or challenge • analyses technologies and explains ethical and sustainable application of technology • thinks critically, drawing on data and information to solve complex problems	• explains the design process and describes constraints and implications for decision making • explains technology theories, concepts and principles and describes the properties of materials or data or systems to address a need, problem or challenge • explains technologies and describes ethical and sustainable application of technology • thinks critically, drawing on data and information to solve problems
	• applies technology concepts, strategies and methodologies with control and precision demonstrating understanding of the historical and cultural context and its impact • creates innovative and high quality	• applies technology concepts, strategies and methodologies with control demonstrating understanding of the historical and cultural context and its impact • creates innovative and quality design	• applies technology concepts, strategies and methodologies with some control demonstrating understanding of context and its impact • creates quality design solutions/

Skills	• creates innovative and high quality design solutions/products using techniques and approaches and justifies ideas coherently • critically analyses potential prototypes and solutions evaluating their appropriateness and effectiveness via iterative improvement and review • communicates complex ideas and insights effectively in a range of mediums to a variety of audiences using appropriate evidence, metalanguage and accurate referencing	• creates innovative and quality design solutions/products using techniques and approaches and justifies ideas coherently • analyses potential prototypes and solutions explaining their appropriateness and effectiveness via iterative improvement and review • communicates ideas effectively in a range of mediums to a variety of audiences using appropriate evidence, metalanguage and accurate referencing	• creates quality design solutions/ products using techniques and approaches and justifies ideas coherently • explains potential prototypes and solutions describing their appropriateness and effectiveness via iterative improvement and review • communicates ideas appropriately in a range of mediums to a variety of audiences using appropriate evidence, metalanguage and accurate referencing

WHY IS YOUR RANK PROBABLY MORE IMPORTANT?

Your ranked score is where you sit within your cohort

Raw Score	Raw ZScore	Temp Scaled	Final Score	**Grade**
103.70	2.21	102.64	102.64	A
89.81	1.41	89.01	89.01	A
89.19	1.38	88.40	88.40	A
88.64	1.34	87.86	87.86	A
85.71	1.18	84.99	84.99	A
83.91	1.07	83.22	83.22	B
83.09	1.02	82.42	82.42	B
81.80	0.95	81.15	81.15	B

HOW CAN I IMPROVE MY MARKS/RANKS/GRADES?

- going beyond just doing the thing
- Look at the achievement standards and justify the mark you think you deserve

HOW DO I SIGN ONTO THESE COMPUTERS?

WHAT ARE WE DOING THIS SEMESTER?

- We're going to build stuff!
- But maybe not the stuff I said we'd build :(

COVID RISKS

- What happens if this classroom has to close for a protracted period of time?

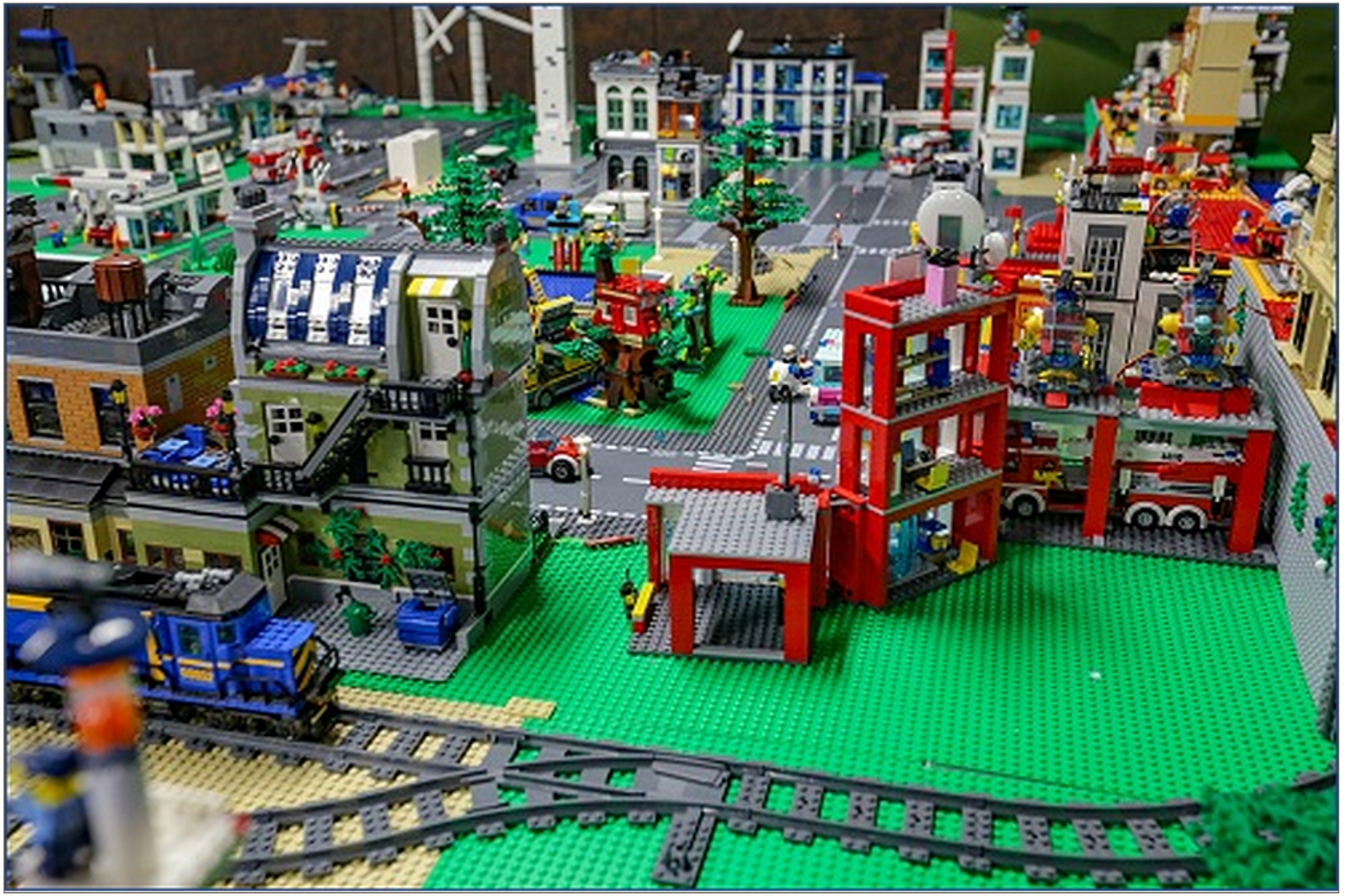
WHAT IS THE PLAN?

- Autonomous cars are still on the cards for those who are super keen / have a plan
- Cyber Range components

WHAT IS A CYBER RANGE?

- The Department of Human Services has made a networked city (out of Lego)
- Their Lego are all mechanical Lego devices
-
    - Dam
    - Train
    - Draw bridges
    - air port
    - etc.

MECHATRONIC CYBER RANGE



COULD WE MAKE THE MECHTRONIC PARTS OF THE CYBER RANGE?

- We have 3d printers | Laser Cutters
- Raspberry Pis | Arduinos Mega | Arduino Nano
- Sensors
- actuators

COULD WE BUILD OUR OWN INTERACTIVE CITY?

????

WHAT'S THE PLAN?

- Design thinking
- Designing in CAD
- Intermediate Arduino | H-Bridge | Objects | State based programming

WHAT IS THE ASSIGNMENT SCHEDULE?

At a very high level (I got covid at the end of last semester)

- Week 5 (ish) Portfolio 35%
- Week 8 (ish) Learning Station 15%
- Term 4 Evidence Guide (new and improved) 35%
- Term 4 Showcase 15%