#### Dear Parents,

- Kính gửi Quý phụ huynh,
- Thank you for coming.
- Cảm ơn Quý vị đã đến tham dự.

As a precautionary measure, please leave a one-seat space between you and the next guest (unless you are members of the same household).

Để tuân thủ biện pháp phòng ngừa, Quý vị vui lòng ngồi cách một ghế với khách bên cạnh (nếu Quý vị không phải là người thân trong gia đình).

Your support with COVID-19 prevention procedures is very much appreciated.

Cảm ơn Quý phụ huynh đã hỗ trợ phòng chống dịch bệnh COVID-19.



### **Exam Stress and Revision Techniques**

Mr Rob Duff (Assistant Head of Secondary) Ms Olivia Jefferson (Teacher of Psychology)



# Managing Stress



#### When is stress useful? When is it not useful?



Positive effects of stress



Source: Adapted from Hebbian version of Yerkes-Dodson law

#### Effects of feeling too much stress



### Difficulty concentrating and solving problems



**Difficulty remembering things** 



Difficulty making simple decisions

- Worrying a lot
- Feeling tense / shaky
- **Feeling overwhelmed**
- **Stomach/ headaches**
- Getting upset / worked up more easily
- Repetitive or unwanted thoughts

You may spot ...

### Others may spot...

- Not sleeping well
- **Being forgetful**
- Lack of concentration
- Irritability / snapping at others
- **Overreactions to situations / events**
- Losing enjoyment in life / activities you once looked forward to
- Eating more/ less than usual

#### Three ways to **manage** stress





Physics Study Timetable

10ост	11	12	13	14	15	16
	Intro to Physics	Analysis of Projectile Motion	Circular Motion & Orbits	Calculations for Projectile Motion	Newton's Law Problems for the	Competing Theories Frames of Reference
	The Pendulum Experiment	Intro to Escape Velocity	Different Earth Orbits	Observing Projectile Motion	Gravitational Field Satellite Motions	Observing Inertial &
	Acceleration Due to Gravity	Rocket Launches	Atmospheric Re- entry	Wernher von Braun Circular Motion & Kepler's Law	The Michleson- Morley Experiment	of References Principle of Relativit
17	18	19	20	21	22	23
Einstein's Proposal	Mass Dilation & Mass-Energy	Predictions & Proof of Special Relativity	Torque & The Motor	Application of the Motor Effect	Eddy Currents	AC Current
Time Dilation	Equivalence	Calculations for	DC Motor Design	The Discovery of	The Induction Investigation	Energy Losses in Transmission
The Relativity of Simultaneity	Summary of Predictions of	Special Relativity	The Motor Effect Investigation	Induction Magnetic Flux &	Applications of	AC Current
Length Contraction	Special Relativity	Face b/w Current Carrying Conductors	Calculation Q's for the Motor Effect	Field Strength Lenz's Law	Induction Generators	Production Practice The Impact of AC
24	25	26	27	28	29	30
Edison & Westinghouse Safety In Transformers Distribution Transformers	Impact of Transformers Tranformer Calculations Energy Losses in Transformers AC Induction Motors	The Induction Motor Experiment Energy Transfers The Nature of Cathode Rays Cathode Ray Tubes	Electric Fields Thomson's Experiment Cathode Ray Screens Production & Reception of Radio Waves Experiment	Hertz's Experiments Black Body Radiation The Particle Model of Light Conductivity of Materials	Semiconductors & Doping Uses of Semiconductors Solar Cells Braggs & Crystal Structure	Conductivity & BCS Application of Semiconductors Graphing Graphing Examples
	and luck!	2	3	4	5	6

- Acknowledge past success
- Visualise future success
- ✓ Use positive self-talk
- Avoid negative people
- Don't compare yourself with friends



#### Managing exam stress (2): Look after yourself



Eat well

Keep hydrated



Be active



Get plenty of sleep



Plan breaks

#### Managing exam stress (3): Be prepared

# Know what you need to knowPlan your time

MON	TUE	WED	THURS	FRI	SAT	SUN
10ост	11 Intro to Physics Intro to Gravity The Pendulum Experiment Acceleration Due to Gravity	12 Analysis of Projectile Motion Intro to Escape Velocity Rocket Launches	13 Circular Motion & Orbits Different Earth Orbits Atmospheric Re- entry	14 Calculations for Projectile Motion Observing Projectile Motion Wernher von Braun Circular Motion & Kepler's Law	15 Newton's Law Problems for the Gravitational Field Satellite Motions The Michleson- Morley Experiment	16 Competing Theories Frames of Reference Observing Inertial & Non-inertial Frames of References Principle of Relativit
17 Einstein's Proposal Time Dilation The Relativity of Simultaneity Length Contraction	18 Mass Dilation & Mass-Energy Equivalence Summary of Predictions of Special Relativity	19 Predictions & Proof of Special Relativity Calculations for Special Relativity The Motor Effect Face b/w Current Carrying Conductors	20 Torque & The Motor Effect DC Motor Design The Motor Effect Investigation Calculation Q's for the Motor Effect	21 Application of the Motor Effect The Discovery of Induction Magnetic Flux & Field Strength Lenz's Law	22 Eddy Currents The Induction Investigation Applications of Induction Generators	23 AC Current Energy Losses in Transmission AC Current Production Practica The Impact of AC
24 Edison & Westinghouse Safety In Transformers Distribution Transformers	25 Impact of Transformers Transformer Calculations Energy Losses in Transformers AC Induction Motors	26 The Induction Motor Experiment Energy Transfers The Nature of Cathode Rays Cathode Ray Tubes	27 Electric Fields Thomson's Experiment Cathode Ray Screens Production & Reception of Radio Waves Experiment	28 Hertz's Experiments Black Body Radiation The Particle Model of Light Conductivity of Materials	29 Semiconductors & Doping Uses of Semiconductors Solar Cells Braggs & Crystal Structure	30 Conductivity & BCS Application of Semiconductors Graphing Graphing Examples
31 Physics Exam (Reminder: it's at 9:25am)	lnov ood luck!	2	3	4	5	6

UNIVERSITY of CAMBRIDGE



#### **SYLLABUS**

Cambridge IGCSE<sup>®</sup> Cambridge International Certificate\* Business Studies

#### 0450

For examination in June and November 2014

\*This syllabus is accredited for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

#### Managing exam stress (3): Be prepared



#### Interleaved Practice



# **Revising Effectively**

#### Common revision strategies

Cramming



#### **Rewriting notes**



Creating mind maps

Testing yourself with flash cards



Highlighting



<form>

Past paper questions

> Explaining concepts to a friend



Which of these do you think are most and least effective?

#### Least effective strategies

#### Cramming







#### **Rewriting notes**

#### Highlighting

### Who has used these strategies before?

#### More effective strategies

#### Creating mind maps



Quizizz Writing your own questions/quizzes Testing yourself with flash cards





# Explaining concepts to a friend



Past paper questions

#### Be prepared: revise effectively

- Concrete
   examples
- Dual coding
- Elaboration
- Interleaving
- Retrieval practice
- Spaced practice





#### Be prepared: revise effectively

#### Chapter 2: Elements, atoms, and compounds Knowledge organiser

Atoms Atoms are incredibly inty particles that make up all substances. There are 92 types of atom - one for each of the 92 elements that exist raturally. Each type of atom has different properties (e.g., size or mass).

#### Elements An element cannot be broken down into other substances is made of one type of atom only.

Examples of elements include gold, potassium, carbon, and hydrogen.

The names and symbols of all the elements can be found on the **Periodic Table** of elements.

Elements in the Periodic Table are				_										£700	,	nter		Å
grouped together	4	2		н									1	4	5	4	7	He
by their properties,	li	Be											в	C.	N	0	P.	Ne
which are different	Na	NE											AL	Si	Ρ	s	C	Nr.
for each element.	к	Ca	Sc	Ti	۷	Cz.	Mo	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Ke
	Rb	Sr	Y	Zı	Nb	Мо	Te	Ru	Rh	Pd	٨e	Cd	In	Sn	Sb	Te		Xe
	Cs	Ba	La	н	ъ	w	Re	0s	łr.	Pt	Au	Hg	п	Pb	Bi	Po	At	Rn
	Fr	Ra	Ac															

The **chemical symbol** for an element is universal – it is the same in every language, even if the name of the element is different. Some examples of chemical symbols for common elements are:

hydrogen	Н	sulfur	S
carbon	С	sodium	Na
oxygen	0	chlorine	CI
nitrogen	N	magnesium	Mg



NaOH one sodium atom for every one oxygen atom, and every one hydrogen atom

Compound are made of two or more different atoms strongly joined together. can be broken down into other substances Naming compounds In a compound made of a metal and a non-metal, the name of the netal comes first. for example, iron bromide, magnesium fluoride If the non-metal atom is oxygen, it is called oxide. If the non-metal tom is chlorine, it is called chloride or example, copper oxide, sodium chloride In a compound made of a non-metal and oxygen, oxygen com second and is called monoxide if there is one oxygen atom or dioxide for two oxygen atoms. for example, carbon monoxide, sulfur dioxide When atoms join together to make a compound, the compound has properties that are different to the properties of the atoms that nake them up. For example, the colours of silver compounds are very different from the colours of the elements that make them up: iodine (greenish vellow) (silvery) (dark grey) silver chloride (vellow)

Activate



#### Location - Haiti Hazard - earthquake Date – 12<sup>th</sup> January 2010 Info - A magnitude 7.0 earthquake that has a depth of 8.1 miles. Its epicentre was located just south west of Port-Au-Prince with 59 aftershocks ranging from 4.2 to 5.9.



Location – Gulf Coast of America Hazard - Hurricane Date – 25<sup>th</sup> August 2005 Info - The deadliest hurricane to hit the Gulf Coast in 2005, it was ranked as the sixth strongest overall to hit the United States. It was also one of the costliest with estimated property damages of US \$81 billion.



Info - A magnitude 7.6 earthquake. Its epicentre was in Kashmir near the city of Muzaffarabad. It occurred on the morning of October 8, 2005.



Location – Japan Hazard – Earthquake and Tsunami Date – 11<sup>th</sup> March 2011 A 9.0 magnitude quake followed by tsunami waves hit the east coast of Japan. With a depth of 24.4 km, this was the largest earthquake to ever strike Japan in recorded history. Documented as the 7th largest earthquake in the world.

#### Be prepared: understand the exam format





- Pay attention to yourself, not others.
- If you panic:
  - Concentrate on taking deep, calm breaths.
  - Tensing and releasing muscles can help too.
- Sit up straight and think positively.
- Remember it's normal to be anxious in an exam.

### Immediately

Do not compare your answers with your friend's answers.

### Later

- Avoid over-analysing and ruminating on your performance.
- Remember you did the best you could at that time.
- Reward yourself for your hard work!

- Try to avoid discussing exam results at home
- Have realistic expectations.
- Don't indulge in comparison.
- Distract, acknowledge and reward!

## Thanks and Questions

