

**The Riverside School**

**Information for the Entrance Exam to Grade 11**

**Important:**

1. **All students** have to take the **English** test.
2. Students who are interested in taking any of the sciences (Physics, Chemistry or Biology) will take the test for the respective subjects **only**.
3. Students wishing to take Physics, Economics or Accounting **will take the Math test**.
4. The syllabus for the Sciences is given below and has been learnt over Grades 9 and 10. Please make sure that the topics have been revised before appearing for the entrance test.

Syllabus

Mathematics	Physics	Chemistry	Biology
Angle and angle properties	<b>Light and sight</b>	Atomic structure and properties	Plant reproduction
Quadratic graphs	Reflection and Refraction of light		Ecology
Set Theory	Lens and mirrors (ray diagrams)	Bonding and structure of matter	Enzymes
Algebra (Factorization and Expansion)	Total internal reflection	Atoms, elements and compounds	Classification
Mensuration	<b>Mechanical waves</b>	Stoichiometry	Digestion
Matrices	<b>Electromagnetic radiations</b>	Chemical energetics	Excretion
Vectors	<b>Sound</b>		Genetics
Probability	<b>Mechanics</b>	The periodic table and its trends	
Functions	<b>Measurements</b>	Organic Chemistry	
Sequence and Series	Density		
Equation of a line	Weight and stretching		
	Moments	Polymers	
	Center of mass		
	Adding forces		
	Energy resources and transfer		
	Pressure ( solid, liquid and gas)		
	Speed, velocity and acceleration with graphs and equations		
	Force		
	Kinetic and potential energy		
	<b>Thermal physics</b>		
	Thermometers		
	Expansion in solid , liquid and gas		

	<p>Specific heat capacity Specific latent heat Radiation</p> <p><b>Magnetism and electricity</b> Static electricity Current, potential difference, resistance, capacitors , Power Magnetic field Electromagnets Electric motors, Electric generators, Electric meters, Transformers <b>systems</b></p> <p><b>Digital electronics</b> <b>Atomic physics</b> Atomic structure Radioactivity</p>		
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