



Syllabus Breakdown

SCIENCE GRADE 6

AIR FOUNDATION SCHOOL SYSTEM

ISLAMABAD | PAKISTAN



Teaching weeks per annum

For the regions where academic session begins in **April**

FIRST TERM: APRIL – SEPTEMBER

Expected Teaching Weeks

April	Teaching Week 1	Teaching Week 2	Teaching Week 3	Teaching Week 4
May	Teaching Week 5	Teaching Week 6	Teaching Week 7	First Midterm Examination
June	<i>Summer Vacation</i>	<i>Summer Vacation</i>	<i>Summer Vacation</i>	<i>Summer Vacation</i>
July	<i>Summer Vacation</i>	<i>Summer Vacation</i>	<i>Summer Vacation</i>	<i>Summer Vacation</i>
August	Teaching Week 8	Teaching Week 9	Teaching Week 10	Teaching Week 11
September	Teaching Week 12	Teaching Week 13	Midterm Examination	Mid Term Examination

SECOND TERM: OCTOBER – MARCH

Expected Teaching Weeks

October	Teaching Week 14	Teaching Week 15	Teaching Week 16	Teaching Week 17
November	Teaching Week 18	Teaching Week 19	Teaching Week 20	Teaching Week 21
December	Teaching Week 22	Second Midterm Examination	<i>Winter Vacation</i>	<i>Winter Vacation</i>
January	Teaching Week 23	Teaching Week 24	Teaching Week 25	Teaching Week 26
February	Teaching Week 27	Teaching Week 28	Teaching Week 29	Teaching Week 30
March	<i>Revision Work</i>	Annual Examination	Annual Examination	<i>PTM & Annual Day</i>



Teaching weeks per annum

For the regions where academic session begins in **August**

FIRST TERM: AUGUST – DECEMBER

Expected Teaching Weeks

August	Teaching Week 1	Teaching Week 2	Teaching Week 3	Teaching Week 4
September	Teaching Week 5	Teaching Week 6	Teaching Week 7	First Midterm Examination
October	Teaching Week 8	Teaching Week 9	Teaching Week 10	Teaching Week 11
November	Teaching Week 12	Teaching Week 13	Teaching Week 14	Teaching Week 15
December	Midterm Examination	Midterm Examination	<i>Winter Vacation</i>	<i>Winter Vacation</i>

SECOND TERM: OCTOBER – MARCH

Expected Teaching Weeks

January	Teaching Week 16	Teaching Week 17	Teaching Week 18	Teaching Week 19
February	Teaching Week 20	Teaching Week 21	Teaching Week 22	Second Midterm Exam
March	Teaching Week 23	Teaching Week 24	Teaching Week 25	Teaching Week 26
April	Teaching Week 27	Teaching Week 28	Teaching Week 29	Teaching Week 30
May	<i>Revision Work</i>	Annual Examination	Annual Examination	<i>PTM & Annual Day</i>



Allocation of periods

Subjects and period distribution for preparing timetable, syllabus breakdown, lesson plans etc.

SN	SUBJECT	JUNIOR			PRIMARY		SECONDARY			EACH SUBJECT PER ANNUM
		GRADE – 1	GRADE – 2	GRADE – 3	GRADE – 4	GRADE – 5	GRADE – 6	GRADE – 7	GRADE – 8	
1	English Language	5	5	5	5	5	5	5	5	150
2	Urdu Language	5	5	5	5	5	5	5	5	
3	Mathematics	5	5	5	5	5	5	5	5	
4	Science	-	-	-	5	5	5	5	5	
5	General Knowledge	5	5	5	-	-	-	-	-	
6	Sindhi Language ¹	4	4	4	4	4	4	4	4	120
7	Social Studies	-	-	-	4	4	-	-	-	
8	Islamiyat	4	4	4	4	4	4	4	4	
9	Nazra-e-Quran ²	4	4	4	4	4	4	4	4	
10	Geography	-	-	-	-	-	3	3	3	
11	Computer Science	3 SRM ³	3 SRM	3 SRM	3 SRM	3 SRM	3	3	3	90
12	Life Skills	3 SRM	3 SRM	3 SRM	-	-	-	-	-	
13	Artwork	3 SRM	3 SRM	3 SRM	-	-	-	-	-	
14	History	-	-	-	-	-	2	2	2	60
15	Life Skills & Art	-	-	-	2 SRM	2 SRM	-	-	-	
		-	-	-	-	-	1 SRM	1 SRM	1 SRM	30
PERIODS PER WEEK		37	37	37	37	37	37	37	37	

¹ In Sindh Region only

² In all regions except Sindh

³ SRM: (Supplementary Reading Material)



WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
1 /30		Being Scientific. Basic steps of scientific investigation page: 2-3 Concept Check		
		Testing your observation, Inference, Concept Check, page: 4-5		
	1.	Predictions, Proposing a hypothesis, Carrying out experiments and recording results. page: 6-7		
	2.	Analyzing the result and drawing a conclusion, carrying out a scientific investigation page:7		
	3.	Analyzing the result and drawing a conclusion, carrying out a scientific investigation page:7		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
2 /30	4.	CHAPTER 1, CELLULAR ORGANIZATION. Reading and Explanation, Cells, Optical Microscope, Observing cells under Microscope. page: 10-11 Concept Check		
	5.	Structure of plant and Animal Cells. page: 12-13		
	6.	Specialized Cells and plant cells. page: 14-15		
	7.	Animal tissue and Plant tissue, Organs/Human Organs. pg. 16-17		
	8.	Differences between tissues and Organs, The main Organs of a flowering plant, Cellular Hierarchy, Plant cell hierarchy pg. 16-18		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
3 /30	9.	Exercises: (Q 1 to 4) page: 20-21		
	10.	Exercises: (Q 5) page: 21		
	11.	Exercises: (Q 6 & 7) page: 21		
	12.	Activities page: 21-22		
	13.	Projects page: 22		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
4 /30	14.	CHAPTER 2, Reproduction in Plants. Reading and Explanation page: 23-24		
	15.	Pollination, Insect-pollinated flowers to Fertilization page: 25-26		
	16.	Fruit Formation page: 27-28		
	17.	Asexual Reproduction & Natural Asexual Reproduction page: 28-30		
	18.	Artificial Asexual Reproduction page: 31-33		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
5 /30	19.	Exercises: (Q 1 to 3) page: 34-35		
	20.	Exercises: (Q 4) page: 35		
	21.	Exercises: (Q 5) page: 35		
	22.	Exercises: (Q 5 & 6) page: 35-36		
	23.	Activities: page: 36		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
6 /30	24.	Projects: Test Yourself (CHAPTER 1 &2)	page: 36 page: 59-61	
	25.	CHAPTER 5: Matter as Particles. Page: 66-67		
	26.	Matter as Particles. Page: 68-69		
	27.	Particle theory of matter	page: 69-70	
	28.	Heat can change the state of matter	page: 70-72	

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
7 /30	29.	Heat can change the state of matter page: 72-74		
	30.	Exercises: (Q 1 to 3) page: 75		
	31.	Exercises: (Q 4 &5) page: 75-76		
	32.	Exercises: (Q 6) page: 76		
	33.	Exercises: (Q 7 & Activities) page: 76		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
8 /30	34.	Projects page: 48		
	35.	CHAPTER 6: Elements and Compounds page: 77-78		
	36.	Metal and Non-Matels to Concept Check page: 78-79		
	37.	Using Elements to Combining Elements page: 80-81		
	38.	Molecules, Compounds page: 81-83		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
9 /30	39.	Exercises: (Q 1 to 3) page: 84		
	40.	Exercises: (Q 4 & 5) page: 85		
	41.	Exercises: (Q 6) page: 85		
	42.	Exercises: (Q 6) page: 85		
	43.	Activities page: 85		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
10/30	44.	Projects page: 85		
	45.	Test Yourself (Chapter 5) page: 98-99		
	46.	Test Yourself (Chapter 6) page: 99-100		
	47.	CHAPTER 8: Energy Forms of Energy page: 103-104		
	48.	Forms of Energy page: 105-106		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
11/30	49.	Energy Transformation page: 106-107		
	50.	Sources of Energy page: 108-109		
	51.	Non-Renewable Energy Resources page: 109-110		
	52.	Non-Renewable Energy Resources page: 111-112		
	53.	Exercises: (Q 1 to 2) page: 113		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
12/30	54.	Exercises: (Q 3) page: 114		
	55.	Exercises: (Q 4) page: 114		
	56.	Activities: page: 114		
	57.	Projects page: 115		
	58.	Projects page: 115		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
13/30	59.	CHAPTER 09: Electricity Static Electricity to Electric Circuit page: 116-117		
	60.	Circuit Diagram to Open and close Circuit page: 117-119		
	61.	Parallel Circuit page: 120-121		
	62.	Factors that affect the brightness of bulbs or speed of motors Page: 121-123		
	63.	Factors that affect the brightness of bulbs or speed of motors Page: 121-123		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
14/30	64.	Exercises: (Q 1 to 3) page: 124-125		
	65.	Exercises: (Q 4) page: 125		
	66.	Exercises: (Q 5) page: 125		
	67.	Exercises: (Q 6) page: 125		
	68.	Activities page: 126		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
15/30	69.	Activities page: 126		
	70.	Projects page: 126-127		
	71.	Projects page: 126-127		
	72.	Test Yourself (CHAPTER 9) page: 162-163		
	73.	Test Yourself (CHAPTER 10) page: 163-164		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
16/30	74.	BIOLOGY: CHAPTER 3: Balanced Diet, Nutrients (Carbohydrates, Proteins) Page: 37-39		
	75.	Nutrients (Carbohydrates, Proteins) Page: 37-39		
	76.	Fats & Oil, Vitamins page: 39-41		
	77.	Minerals, Fibre, Water page: 41-43		
	78.	“Balanced diet is different for everyone” to “Balanced diet and fitness Concept Map” page: 43-45		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
17/30	79.	Exercises: (Q 1 to 4) page: 46-47		
	80.	Exercises: (Q 5) page: 47		
	81.	Exercises: (Q 6) page: 47		
	82.	Exercises: (Q 7 & 8) page: 47		
	83.	Activities page: 47-48		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
18/30	84.	Projects page: 48		
	85.	Biology :CHPATER 4: The Digestive System Digestion, The Digestive system (mouth, Gullet) page: 49-50		
	86.	The Digestive system (Stomach to Enzymes) page: 51-52		
	87.	The Digestive system (Stomach to Pancreas,) page: 51-53		
	88.	Problem with digestive system page: 53-55		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
19/30	89.	Exercises: (Q 1 to 3) page: 56		
	90.	Exercises: (Q 3 & 4) page: 56-57		
	91.	Exercises: (Q 5) page: 57		
	92.	Exercises: (Q 5 & 6) page: 57		
	93.	Activities page: 58		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
20/30	94.	Projects page: 58		
	95.	Test Yourself (CHAPTER 3) Page: 61-63		
	96.	Test Yourself (CHAPTER 4) Page: 63-64		
	97.	CHEMISTRY: CHAPTER 7: Mixtures Page: 86-87 Mixture and Types of Mixtures, Difference between elements, compounds and mixtures, Concept Check page: 86-88		
	98.	Composition of Air, Pure Substances and mixtures page: 88-89		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
21/30	99.	Separating Mixtures page: 90-91		
	100.	Separating Mixtures, Paper chromatography, Concept check page: 91-92		
	101.	Water the Universal Solvent Page: 93-94		
	102.	Exercises: (Q 1 to 3) page: 95-96		
	103.	Exercises: (Q 4) page: 96		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
22/30	104.	Exercises: (Q 5 & 6) page: 96-97		
	105.	Activities page: 97		
	106.	Projects: page: 97		
	107.	Test Yourself (CHAPTER 7, Mixtures) page: 101		
	108.	PHYSICS: CHAPTER 10: Magnetism A Magnet and Types of Magnet page: 128-129		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
23/30	109.	Making a Magnet and Magnetic Field, Compass, The Earth has a magnetic field Electric current has a magnetic field) page: 130-131		
	110.	How can a magnet be demagnetized? To uses of Electromagnets page: 131-133		
	111.	Exercises: (Q 1 to 2) page: 134-135		
	112.	Exercises: (Q 3) page: 135		
	113.	Exercises: (Q 4) page: 135		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
24/30	114.	Exercises: (Q 5 & Activities) page: 135-136		
	115.	Activities page: 136		
	116.	Projects page: 136		
	117.	CHAPTER 11: Solar System (Planets of Our Solar System) Page: 137-139		
	118.	CHAPTER 11: Solar System (Planets of Our Solar System) Page: 137-139		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
25/30	119.	Satellite, The Earth’s natural satellite, The Moon, page: 139-140		
	120.	Asteroids, Meteoroids page: 141-142		
	121.	Comets to Artificial Satellite page: 142-144		
	122.	Comets to Artificial Satellite page: 145-147		
	123.	Comets to Artificial Satellite page: 145-147		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
26/30	124.	Exercises: (Q 1 to 2) page: 148		
	125.	Exercises: (Q 3) page: 148		
	126.	Exercises: (Q 4 & Activities) page: 149		
	127.	Activities page: 149		
	128.	Projects page: 47-48		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
27/30	129.	CHAPTER 12: Technology in Everyday Life. (Experiment 1) page: 150-152		
	130.	CHAPTER 12: Technology in Everyday Life. (Experiment 1) page: 150-152		
	131.	(Experiment 2) page: 152-154		
	132.	(Experiment 2) page: 152-154		
	133.	Benefits of Micro-organisms (Experiment 1) page: 154-155		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
28/30	134.	Benefits of Micro-organisms (Experiment 2) page: 155-156		
	135.	Converting Solar energy to the Heat Energy page: 156-157		
	136.	How to design an Electric bell? page: 158-159		
	137.	How to design an Electric bell? page: 158-159		
	138.	Test Yourself (CHAPTER 10) page: 163-164		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
29/30	139.	Test Yourself (CHAPTER 11) Page: 164-165		
	140.	Test Yourself (CHAPTER 12) Page: 166		
	141.	Assessment		
	142.	Assessment		
	143.	Assessment		

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WEEK	[150]	UNIT & TOPIC CONTENT INCLUDING PAGE NUMBER	SIGN CR/CT	DATE
30/30	144.	Assessment		
	145.	Assessment		
	146.	Assessment		
	147.	Assessment		
	148.	Assessment		

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