Stage 9 2022-23 Autumn Term Spring Term Summer Term						
	Autum	nn Term	Spring	g Term	Summer	Term
	1	2	1	2		

 •					<u> </u>		1			
between		identty 137 <u>@1</u>	•	, alculate t! e arc		m+Bctoidentfy	•	; et up and solve a		a line from a
truncatn" and	•	; implify an		len"t! of a		parallel lines		tri"onometric		point (at a point)
roundin" 31, 32,		e+pression		sector w! en		159a <u>13%-137</u>		e#uaton to 4nd a		146a, 146b <u>/. %-</u>
90 <u>1%</u>		involvin'' 5+ ⁷ 6 by		radius is "iven	•	(earran"e an		missin" side in a		<u>/-\$</u>
 Identfyt!e 		collectn" li2e		118 <u>/-&-/%\$</u>		e#uaton into t! e		ri"! t-an"led	•	nderstand t! e
minimum and		terms 33 <u>- 1</u>		foundaton boo2		form y < m+ B c		trian"le 168 <u>/-&-</u>		meanin" of locus
ma+imum	•	ldentfy w! en it is	•	3now ! ow to		159a <u>13%-137</u>		<u>/%1</u>		(loci) 165 <u>/-/-</u>
values of an		necessary to		4nd t! e area of a	•	Interpret t! e	•	; et up and solve a		<u>/-3</u>
amount t! at		remove factors to		sector 167 /-&-		"radient of a		tri"onometric	•	3now ! ow to
! as been		factorise a		<u>/%\$ foundaton</u>		strai"! t line		e#uaton w!en		construct t! e
rounded (to		#uadratc		<u>boo2</u>		"rap! as a rate of		t! e un2nown is in		locus of points a
nearest +1 + d8p81		e+pression 94 <u>-%-</u>	•	, alculate t! e		c! an"e 216b		t! e denominator		4+ed distance
+ s8f8)132, 206		<u>-7</u>		area of a sector		<u>1%/-1%-</u>		of a fract on 168		from a point
<u>11%</u>	•	ldentfy w! en it is		w! en radius is	•	Clot "rap! s of		<u>/-&-/%1</u>		(from a line) 165
• se ine#ualites		necessary to 4nd		"iven 167 <u>/-&-</u>		#uadratc (cubic1	•	; et up and solve a		/-/-/-3
to describe t! e		two linear		/%\$ foundaton		reciprocal)		tri"onometric	•	, ! oose
ran"e of values		e+pressions to		<u>boo2</u>		functons 98, 161		e#uaton to 4nd a		tec! ni#ues to
for a rounded		factorise a	•	, alculate t! e		<u>1. 3-1-\$</u>		missin" an"le in a		construct /'
value 132, 206,		#uadratc		an"le of a sector	•	(eco"nise and		ri"! t-an"led		s! apes7 e8''8
155 <u>11%</u>		e+pression <u>-7@</u>		w! en t! e arc		interpret t! e		trian''le 168 <u>/-&-</u>		r! ombus
	•	· · ·		len"t! and		"rap! s of		<u>/%1</u>	•	, ombine
; olve problems		#uadratc		radius are		#uadratc (cubic1	•	se tri"onometry		tec! ni#ues to
involvin" t! e		e+pression of t! e		2nown 167 <u>/-&-</u>		reciprocal)		to solve problems		solve more
ma+imum and minimum values		form +A B b+ B c		/%\$ foundaton		functons98, 161		involvin''		comple+ loci
of an amount t! at		157, 192 <u>-7@</u>		boo2		1.3-1-\$		bearin"s168 /-&-		problems 165
! as been rounded	•	3now ! ow to set	•	3now ! ow to	•	; 2etc! "rap! s of		/%1		/-/-/-3
132, 206 <u>11%</u>		upan		4nd t! e surface		#uadratc (cubic1				3now ! ow to
		mat! ematcal		area of a ri"! t		reciprocal)		se tri"onometry to		deal wit! a
2C ● Identfvifa				prism (cylinder)		functions 98, 161	S	olve problems		c! an"e in dept!
 Identfy if a 										

				[]
	ract on is	ar"ument		
		• Eor2 out w! y two		
re	ecurrin" N32	al"ebraic		
5	6-59	e+pressions are		
• (ecall some	e#uivalent <u>@1</u>		
d	lecimal and	• , reate a		
fr	racton	mat! ematcal		
e	#uivalents	ar"ument to s! ow		
(6	e8''8 tent! s1	t! at two al"ebraic		
	D! s1 ei"! t! s)	e+pressions are		
	132 <u>57-58</u>	e#uivalent @1		
		•		
	lecimal as a			
	racton N32			
5				
	Erite a			
	ract on in its			
	owest terms			
	y cancellin"			
	ommon			
	actors N23c			
	<u>2</u>			
	dentfyw!en			
	fracton can			
	e scaled to			
	ent!s or			
	undredt!s			
	132			
• ,	onvert a			

fract on to a	e#uatons	• , alculate an	G4b <u>3\$/-3\$.</u>	direct (inverse)
decimal by	162 <u>1\$%-1\$&</u>	est mate of t! e)ind and name 	proportion
scalin" (w! en	Interpret t! e	mean from a	t! e e#uaton of	situaton 199 @/-
possible) N32	solut on to a	"rouped	t! e mirror line	<u>@%</u>
<u>57-59</u>	pair of	fre#uency table,	for a "iven	 nderstand t! e
• se a	simultaneous	130b <u>33&-33@</u>	reFecton <u>3\$/-</u>	connecton
calculator to	e#uatons	 9stmate t! e 	<u>3\$.</u>	between t! e
c! an"e any	<u>1\$%-1\$&</u>	ran"e from a	 ' escribe a 	multplier1t!e
fraction to a	• ; olve a	"rouped	translaton as a	e+pression and
decimal N44	#uadratc	fre#uency table	/' vector G5	t! e "rap!
<u>56-57</u>	e#uaton of	130a, 130b <u>33&-</u>	<u>3\$7-3\$&</u>	• 3now t! e
• Erite a	t! e form xA B	<u>33@</u>	 nderstand t! e 	meanin" of
decimal as a	bx B c by	Analyse and	concept and	con"ruent
percenta"e	factorisin"	compare sets of	lan"ua"e of	(similar) s! apes
N32 77-80	157 <u>@&</u>	data 62 <u>33@</u>	rota t ons G6 <u>3</u> \$	12b, 144 <u>31&-3/1</u>
• Erite a	• ; olve a	Appreciate t! e	<u>3\$%</u>	• Identfy
fract on as a	#uadratc	limitatons of	• , arry out a	con"ruence
percenta"e	e#uaton of	di: erent	rotaton usin" a	(similarity) of
N32 77-80	t! e form axA	statstcs (mean1	"iven an"le1	s! apes in a ran"e
(eco"nise	B bx B c by	median1 mode1	direct on and	of situatons 12b,
w! en a	factorisin"	ran''e) 62 <u>33@</u>	centre of	144 31&-3/1
fracton	157, 192 <u>@@</u>	• ,!oose	rota t on G6 <u>3\$</u>	 Identfyt!e
(percenta"e)	• ; olve a	appropriate	3\$%	informaton
s! ould be	#uadratc	statstcsto		re#uired to solve
interpreted as	e#uaton by	describe a set of	' escribe a rotaton	a problem
a number	rearran"in"	data 62 <u>33@</u>	usin" mat! ematcal	involvin" similar
• (eco"nise	and		lan"ua"e G6 <u>3\$</u> <u>3\$%</u>	s! apes 144 <u>31&-</u>
w! en a	factorisin"	lust fy c! oice of		3/1
fracton		statstcsto		

(percenta	a''e) 157, 192 <u>@@</u>	describe a set of)	indin" missin"	
s! ould be		data 62 <u>33@</u>	l le	en"t! s in similar	
interpret	•		S	! apes 144 <u>31&-3/1</u>	
a operato	or #uadratc				
Identfyt	!e e#uaton				
multplie	r for a cannot be				
percenta	"e solved by				
increase	or factorisin"				
decrease	191				
w! en t! e	• Ma2e				
percenta	"e is connect ons				
"reater t	! an between				
1\$\$J R9!	b <u>81</u> "rap! s and				
• se	#uadratc				
calculato	rs to e#ua t ons of				
increase					
amount b	by a B <i>b</i> x B <i>c</i> < \$				
percenta					
"reater t					
1\$\$J R9!	b <u>81-</u> connectons				
<u>82</u>	between				
• ; olve	"rap! s and				
problems					
involvin"					
percenta					
c! an"e 1					
<u>83-84</u>	B e <u>1%%-1%@</u>				
• ; olve ori'	"inal				
value)ind appro+imate				

•	problems w! en wor2in'' wit! percenta''es 110 <u>85</u> ; olve 4nancial problems includin'' simple interest 111 <u>86-87</u> nderstand		

		dia"ram to				
		calculate				
		probabilites of				
		independent				
		combined events				
		151,175 <u>3737%</u>				
		• se a tree				
		dia"ram to				
		calculate				
		probabili t es of				
		dependent				
		combined events				
		151,175 <u>3737@</u>				
		101,170 <u>01 010</u>				
		nderstand t! at				
		relatve fre#uency				
		tends towards				
		t! eore t cal				
		probability as sample				
		siHe increases <u>3%&-</u>				
Assessment	. eacher8Ass.	9.1 E: A%	. eacher8Ass.	9.2 E: A%	. eacher8Ass.	9.& E: A%
	. est	6nit tests	. est	6nit tests	. est	6nit tests
	6nit tests		6nit tests		6nit tests	

Curriculum Area: Math					
!ub"ect:					
#ear Gr\$u%	&a ic '(\$) er Abilit* +, \$i, t / t! eir own8	Clear 'Mile Abilit* +, \$i, t / appreciate t! e di: erence between	Oetaile- '1i2her Abilit* +, \$i, t /		

%athematics is an interconnecte5 sub=ect in 4hich pupils nee5 to be able to mo"e >uently bet4een
representations o/ mathematical i5eas he programme o/ stu5y /or ?ey stage & is organise5 into
apparently 5istinct 5omains@but pupils shoul5 buil5 on ?ey stage 2 an5 connections across
mathematical i5eas to 5e"elop >uency@mathematical reasoning an5 competence in sol"ing
increasingly sophisticate5 problems hey shoul5 also apply their mathematical ?no4le5ge in
sciencee geographye computing an5 other sub=ects he structure is 5esigne5 to bri5ge bet4een
K! 2 an5 K!)@buil5ing both 4ithin an5 bet4een ?ey topic areas he structure also buil5s the
complexity le"els 4ithin topics an5 gi"es a greater "ariation in the challenge gi"en to pupils.
Resilience
upils 4ill increase their resilience 5uring the course through learning ne4 conceptse using prior
?no4le5ge to 5e"elop mathematical >uency an5 applying s?ills to a "ariety o/ situations an5
problems. upils 4ill be challenge5 in all lessons an5 4ill sho4 that they ha"e learne5 /rom
mista?es through a "ariety o/ tas?s inclu5ing connect exercises he challenge acti"ities 4ill ha"e
the aim o/ 5e"eloping both s?ills an5 high aspirations in both this sub=ect an5 li/e beyon5.
Aesilience 4ill also be 5e" elope5 4ithin the Key maths s?ills belo4 B>uency@ reasoning an5
problem sol"ingC.
Collaboration
upils 4ill be gi"en the opportunity to 4or? together to 5e"elop an5 share their i5eas on topics@
5iscuss misconceptions an5 ho4 these topics can be use5 in real+li/e situations.
Creativity
upils 4ill 5e"elop creati"ity through a "ariety o/ problem sol"ing acti"ities 4ithin each topice
4or?ing on in5epen5ent tas?s beyon5 the classroom such as %angahigh acti"ities@ an5 apply the
?ey s?ills B>uency@reasoning an5 problem sol"ingC.
Skills Buil er
CO%%6N\$CA. \$ON D , istening & ! pea?ingE
upils are expecte5 to acti ely listen so that they can /ollo4 instructions an5 pic? out
misconceptions. B, \$! . EN\$N' C

CEÐBÒZE€ OBIO, 3\$Ði Doß IÐ hmi ! o'' iÐBaqi' iÐi

! \$tracurricular
! tretch an5 challenge club
Chess & games club
(ome4or? club