IRISH CARRICULLAM			HRS	euro /hr	euro /month	euro /year	Q&A pdf /chapter	HW Help /Chapter
Germany Kindergarten Mathematics								
#	**TOPIC**	**TITLE**						
1	Self Assessment	Self Assessment – Kindergarten						
2	Using and applying number	The numbers 1 to 5						
3	Using and applying number	The numbers 6 to 9						
4	The number system	Ordinal numbers 1 to 9						
5	Using and applying number	Zero and counting numbers 1 to 9						
6	Using and applying number	The number 10						
7	Using and applying number	Numbers 11 to 20						
8	Using and applying number	Using place value to order numbers up to 20						
9	Reasoning	Simple addition up to the number 10						
10	Calculations	Subtraction up to the number 10						
11	Time, days of week	Days of the week						
12	Time, duration	Duration						
13	Exam	Exam – Kindergarten						
Germany Year 1 Mathematics								
#	**TOPIC**	**TITLE**						
1	Self Assessment	Self Assessment – Year 1						
2	The number system	Ordinal numbers 1 to 9						
3	Using and applying number	Zero and counting numbers 1 to 9						
4	Using and applying number	The number 10						
5	Using and applying number	Numbers 11 to 20						
6	Using and applying number	Using place value to order numbers up to 20						
7	Reasoning	Simple addition up to the number 10						
8	Reasoning	Simple addition up to the number 20						
9	Calculations	Subtraction by Comparison						
10	Calculations	Subtraction up to the number 10						
11	Calculations	Subtraction up to the number 20 and beyond						
12	Calculation-grouping	Multiplication using equal groups						
13	Calculation-grouping	Multiplication using repeated addition						
14	Calculation-multiplication	The multiplication sign						
15	Calculation sharing/division	Strategies for division						
16	Length	Compare length by using informal units of measurement						
17	Weight/mass	Introducing the concept of mass						
18	Time, days of week	Days of the week						
19	Time, duration	Duration						
20	Time, months	Months and seasons of the year						
21	Time, quarter to, past	Quarter past and quarter to						
22	Time, analogue	O'clock and half past on the analogue clock						
23	Exam	Exam – Year 1						
Germany Year 2 Mathematics								
#	**TOPIC**	**TITLE**						

1	Self Assessment	Self Assessment – Year 2
2	Reasoning	Simple addition up to the number 20
3	Calculations	Subtraction by Comparison
4	Calculations	Subtraction up to the number 20 and beyond
5	Calculation-grouping	Multiplication using equal groups
6	Calculation-grouping	Multiplication using repeated addition
7	Calculation-multiplication	The multiplication sign
8	Calculation sharing/division	Strategies for division
9	Calculation-multiples	Multiples of 10 up to 100
10	Calculations	The numbers 20 to 99
11	Calculation 10-100	Counting by 1, 2, 5, and 10 to 100
12	Addition	Addition to 99
13	Subtraction	Subtraction up to the number 99
14	Time, months	Months and seasons of the year
15	Time, quarter to, past	Quarter past and quarter to
16	Time, analogue	O'clock and half past on the analogue clock
17	Lines and angles	Describing position.
18	Data	Pictograms
19	Data	Bar Charts
20	Length	Compare length by using informal units of measurement
21	Length	Using the metre as a formal unit to measure perimeter
22	Length	Using the formal unit of the centimetre to measure length and perimeter
23	Volume	Introduction to volume. using the cubic centimetre as a standard unit
24	Weight/mass	Introducing the concept of mass
25	Exam	Exam – Year 2

Germany Year 3 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 3
2	Calculation-multiples	Multiples of 10 up to 100
3	Calculations	The numbers 20 to 99
4	Calculation 10-100	Counting by 1, 2, 5, and 10 to 100
5	Addition	Addition to 99
6	Calculation-larger numbers	The numbers 100 to 999
7	Subtraction	Subtraction up to the number 99
8	Subtraction	Subtraction with borrowing
9	Subtraction	Subtraction of two-digit numbers Involving comparison.
10	Problems	Solve and record division using known facts and sharing
11	Length	Using the metre as a formal unit to measure perimeter
12	Length	Using the formal unit of the centimetre to measure length and perimeter
13	Area	Introduction to the square centimetre.
14	Area	Comparing and ordering areas.
15	Volume	Introduction to volume. using the cubic centimetre as a standard unit

16	Weight/mass	Introducing the concept of mass
17	3-D shapes	Constructing models.
18	Capacity	Using the cubic cm and displacement to measure volume and capacity
19	Weight/mass	The kilogram
20	2-D shapes	Using the prefix to determine polygons
21	2-D shapes	Spatial properties of quadrilaterals
22	Lines and angles	Describing position.
23	Lines and angles	Mapping and grid references
24	Data	Pictograms
25	Data	Bar Charts
26	Time, minutes	Analogue – Telling time – minutes in the hour
27	Time, units	Units of time
28	Time, minutes to the hour	Minutes to
29	Time, minutes past the hour	Minutes past
30	Time, digital, analogue	Comparing analogue and digital time
31	Time, digital	O'clock and half past using digital time
32	Time, analogue	O'clock and half past on the analogue clock
33	Fractions	Using fractions 1/2, 1/4, 1/8 to describe part of a whole
34	Fractions	Using fractions 1/2, 1/4, 1/8 to describe parts of a group or collection
35	Fractions	Comparing and ordering fractions
36	Exam	Exam – Year 3

Germany Year 4 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 4
2	Calculation-larger numbers	The numbers 100 to 999
3	Subtraction	Subtraction with borrowing
4	Subtraction	Subtraction of two-digit numbers Involving comparison.
5	Multiplication	Multiplication – important facts.
6	Place value	The numbers 1000 to 9999
7	Addition	Addition up to the number 999
8	Subtraction	Subtraction up to the number 999 using the renaming method
9	Problems	Solve and record division using known facts and sharing
10	Division	Division with and without a remainder.
11	Length	Using the metre as a formal unit to measure perimeter
12	Length	Using the formal unit of the centimetre to measure length and perimeter
13	Length	Read and calculate distances on a map using the formal unit kilometre
14	Length	Compare and convert formal units of measurement
15	Area	Introduction to the square centimetre.
16	Area	Comparing and ordering areas.
17	Weight/mass	The kilogram
18	Weight/mass	The gram and net mass
19	2-D shapes	Using the prefix to determine polygons

20	2-D shapes	Spatial properties of quadrilaterals						
21	Angles	Measure and classify angles						
22	2-D shapes	Recognise and name triangles						
23	3-D shapes	Recognise and name pyramids according to spatial properties						
24	Tessellating 2-D shapes	Use grids to enlarge/reduce 2D shapes						
25	3-D shapes	Recognise and name prisms according to spatial properties						
26	Capacity	The relationship between the common units of capacity, the litre and the millilitre						
27	Capacity	Using the cubic cm and displacement to measure volume and capacity						
28	Capacity	Using the cubic cm as a standard unit of measurement for volume and capacity						
29	Capacity	Converting between volume and capacity using kilolitres and litres						
30	Capacity	Estimate, measure and compare the capacity of containers						
31	Capacity	Converting between volume and capacity using millilitres and litres						
32	Lines and angles	Mapping and grid references						
33	Lines and angles	Main and intermediate compass points						
34	Lines and angles	Informal coordinate system						
35	Time, minutes	Analogue – Telling time – minutes in the hour						
36	Time, digital, analogue	Comparing analogue and digital time						
37	Time, units	Units of time						
38	Time, minutes to the hour	Minutes to						
39	Time, minutes past the hour	Minutes past						
40	Time, a.m. p.m.	AM and PM time						
41	Decimals	Introduction to decimals						
42	Decimals	Comparing and ordering decimals to two decimal places						
43	Decimals	Decimals with whole numbers 10th and 100th						
44	Decimals	Adding decimals to two decimal places						
45	Decimals	Subtracting decimals to two decimal places						
46	Decimals	Using decimals – shopping problems						
47	Decimals	Using decimals to record length						
48	Decimals	Rounding decimals						
49	Fractions	Using fractions 1/2, 1/4, 1/8 to describe part of a whole						
50	Fractions	Using fractions 1/2, 1/4, 1/8 to describe parts of a group or collection						
51	Fractions	Comparing and ordering fractions						
52	Fractions	Finding equivalent fractions						
53	Fractions	mixed numbers (mixed numerals)						
54	Fractions	Fractions 1/5, 1/10, 1/100						
55	Percentages	Introduction to percentages, including relating common fractions to percentages						
56	Percentages	Changing fractions and decimals to percentages using tenths and hundredths						
57	Exam	Exam – Year 4						
Germany Year 5 Mathematics								

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 5
2	Place value	The numbers 1000 to 9999
3	Addition	Addition up to the number 999
4	Subtraction	Subtraction up to the number 999 using the renaming method
5	Counting and numeration	The numbers 10 000 to 99 999
6	Counting and numeration	Addition to 9999 and beyond
7	Subtraction	Subtraction involving four digit numbers and beyond using the renaming method.
8	Multiplication	Multiples and factors of whole numbers
9	Multiplication	Multiplication using extended algorithms.
10	Division	Division with and without a remainder.
11	Division	Dividing two and three digit numbers by a single digit number.
12	Multiplication	Multiplication by 2 and 3 digits
13	Multiplication	Multiplying 2-digit numbers by multiple of 10
14	Multiplication	Multiplying 3 and 4-digit numbers by multiples of 100
15	Time, a.m. p.m.	AM and PM time
16	Time, 24-hour	24 hour time
17	Time zones	Time zones
18	Time, distance, speed	Average speed
19	Angles	Measure and classify angles
20	2-D shapes	Recognise and name triangles
21	3-D shapes	Recognise and name pyramids according to spatial properties
22	3-D shapes	Recognise and name prisms according to spatial properties
23	Lines and angles	Mapping and grid references
24	3-D shapes	Recognise nets for prisms, pyramids, cubes and cones
25	Tessellating 2-D shapes	Use grids to enlarge/reduce 2D shapes
26	3-D shapes	Viewing 3-D shapes.
27	Lines and angles	Main and intermediate compass points
28	Lines and angles	Informal coordinate system
29	Data	Line graphs.
30	Data	Pie and bar graphs.
31	Length	Read and calculate distances on a map using the formal unit kilometre
32	Length	Compare and convert formal units of measurement
33	Area	Introduction to the square centimetre.
34	Area	Comparing and ordering areas.
35	Area	Larger areas: square metre, hectare, square kilometre.
36	Volume	Using the cubic centimetre to measure volume.
37	Capacity	The relationship between the common units of capacity, the litre and the millilitre
38	Capacity	Using the cubic cm and displacement to measure volume and capacity
39	Capacity	Using the cubic cm as a standard unit of measurement for volume and capacity
40	Capacity	Converting between volume and capacity using kilolitres and litres

41	Capacity	Estimate, measure and compare the capacity of containers
42	Weight/mass	The kilogram
43	Weight/mass	The gram and net mass
44	Decimals	Introduction to decimals
45	Decimals	Comparing and ordering decimals to two decimal places
46	Decimals	Decimals with whole numbers 10th and 100th
47	Decimals	Adding decimals to two decimal places
48	Decimals	Subtracting decimals to two decimal places
49	Decimals	Using decimals – shopping problems
50	Decimals	Using decimals to record length
51	Decimals	Rounding decimals
52	Decimals	Adding decimals with a different number of decimal places
53	Decimals	Subtracting decimals with a different number of places
54	Decimals	Multiplying decimals by 10, 100 and 1000
55	Decimals	Multiplying decimals by whole numbers
56	Decimals	Dividing decimals by 10, 100 and 1000
57	Decimals	Dividing decimal fractions by whole numbers
58	Fractions	Finding equivalent fractions
59	Fractions	mixed numbers (mixed numerals)
60	Fractions	Fractions 1/5, 1/10, 1/100
61	Fractions	Subtracting fractions from whole numbers
62	Fractions	Adding and subtracting fractions with the same denominator
63	Percentages	Introduction to percentages, including relating common fractions to percentages
64	Percentages	Changing fractions and decimals to percentages using tenths and hundredths
65	Sign word problems	Solving Word Problems by recognising Sign Words
66	Equations	Problem solving strategies
67	Number problems	Problems with numbers.
68	Money	Problems involving money
69	Exam	Exam – Year 5

Germany Year 6 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 6
2	Counting and numeration	The numbers 10 000 to 99 999
3	Counting and numeration	Addition to 9999 and beyond
4	Subtraction	Subtraction involving four digit numbers and beyond using the renaming method.
5	Counting and numeration	Seven digit numbers
6	Multiplication	Multiples and factors of whole numbers
7	Multiplication	Multiplication using extended algorithms.
8	Division	Division with and without a remainder.
9	Division	Dividing two and three digit numbers by a single digit number.

10	Multiplication	Multiplication by 2 and 3 digits						
11	Division	Divide whole numbers by a 2 digit divisor						
12	Multiplication	Multiplying 2-digit numbers by multiple of 10						
13	Multiplication	Multiplying 3 and 4-digit numbers by multiples of 100						
14	Multiplication	Multiplying 2-digit numbers by 2-digit numbers						
15	Multiplication	Multiplying 4-digit numbers by 3-digit numbers						
16	Division/repeat subtraction	Repeated subtraction with divisors less than 20 with no remainders						
17	Division/repeat subtraction	Repeated subtraction by multiples of 10 with divisors less than 20 with no remainders						
18	Division/repeat subtraction	Repeated subtraction by multiples of 2, 3 and 4 with divisors greater than 20 with no remainders						
19	Division/repeat subtraction	Repeated subtraction by multiples of 1,2 and 3 with divisors less than 20 with remainders						
20	Division/repeat subtraction	Repeated subtraction by multiples of 10 with divisors less than 20 with remainders						
21	Division/repeat subtraction	Repeated subtraction with divisors greater than 20 with remainders as fractions						
22	Division/repeat subtraction	Repeated subtraction with divisors less than 35 with some remainders						
23	Division/repeat subtraction	Repeated subtraction with divisors less than 55 with dividends of 3 and 4-digits with some remainders						
24	Division/repeat subtraction	Repeated subtraction with divisors greater than 50 with dividends of thousands and some remainders						
25	Division/repeat subtraction	Using divide, multiply and subtraction in the bring down method						
26	3-D shapes	Recognise and name pyramids according to spatial properties				3		
27	3-D shapes	Recognise and name prisms according to spatial properties				3		
28	Area	Introducing the rules for finding the area of a rectangle and a parallelogram.						
29	Area	Larger areas: square metre, hectare, square kilometre.						
30	Volume	Introducing the formula for volume.						
31	Volume	Using the cubic metre to measure volume.						
32	Volume	Solving Problems about Volume – Part 1.						
33	Volume	Solving Problems about Volume – Part 2.						
34	Capacity	Converting between volume and capacity using millilitres and litres						
35	Weight/mass	The tonne – converting units and problems						
36	Geometry-angles	Measuring angles						
37	Data	Line graphs.						
38	Data	Pie and bar graphs.						
39	Time, 24-hour	24 hour time						
40	Time zones	Time zones						
41	Time, distance, speed	Average speed						
42	3-D shapes	Recognise nets for prisms, pyramids, cubes and cones						

43	Tessellating 2-D shapes	Use grids to enlarge/reduce 2D shapes
44	3-D shapes	Viewing 3-D shapes.
45	Lines and angles	Main and intermediate compass points
46	Lines and angles	Informal coordinate system
47	Decimals	Decimals to three decimal places
48	Decimals	Adding decimals with a different number of decimal places
49	Decimals	Subtracting decimals with a different number of places
50	Decimals	Multiplying decimals by 10, 100 and 1000
51	Decimals	Multiplying decimals by whole numbers
52	Decimals	Dividing decimals by 10, 100 and 1000
53	Decimals	Dividing decimal fractions by whole numbers
54	Decimals	Dividing numbers by a decimal fraction
55	Percentages	Introduction to percentages, including relating common fractions to percentages
56	Percentages	Changing fractions and decimals to percentages using tenths and hundredths
57	Percentages	Changing percentages to fractions and decimals
58	Fractions	Improper fractions
59	Fractions	Subtracting fractions from whole numbers
60	Fractions	Adding and subtracting fractions with the same denominator
61	Fractions	Multiplying and dividing to obtain equivalent fractions
62	Fractions	Reducing fractions to lowest equivalent form
63	Fractions	Comparing and ordering fractions greater than (>) 1
64	Fractions	Multiplying fractions by whole numbers
65	Fractions	Fractions of whole numbers
66	Sign word problems	Solving Word Problems by recognising Sign Words
67	Equations	Problem solving strategies
68	Number problems	Problems with numbers.
69	Money	Problems involving money
70	Length	Problems with length.
71	Mass	Problems with mass.
72	Area	Problems with area.
73	Volume/capacity	Problems with volume/capacity.
74	Exam	Exam – Year 6

Germany Year 7 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 7
2	Multiplication	Multiplying 2-digit numbers by 2-digit numbers
3	Multiplication	Multiplying 4-digit numbers by 3-digit numbers
4	Division/repeat subtraction	Repeated subtraction with divisors less than 20 with no remainders

5	Division/repeat subtraction	Repeated subtraction by multiples of 10 with divisors less than 20 with no remainders						
6	Division/repeat subtraction	Repeated subtraction by multiples of 2, 3 and 4 with divisors greater than 20 with no remainders						
7	Division/repeat subtraction	Repeated subtraction by multiples of 1,2 and 3 with divisors less than 20 with remainders						
8	Division/repeat subtraction	Repeated subtraction by multiples of 10 with divisors less than 20 with remainders						
9	Division/repeat subtraction	Repeated subtraction with divisors greater than 20 with remainders as fractions						
10	Division/repeat subtraction	Repeated subtraction with divisors less than 35 with some remainders						
11	Division/repeat subtraction	Repeated subtraction with divisors less than 55 with dividends of 3 and 4-digits with some remainders						
12	Division/repeat subtraction	Repeated subtraction with divisors greater than 50 with dividends of thousands and some remainders						
13	Division/repeat subtraction	Using divide, multiply and subtraction in the bring down method						
14	Decimals	Rounding decimals						
15	Decimals	Decimals to three decimal places						
16	Decimals	Adding decimals with a different number of decimal places						
17	Decimals	Subtracting decimals with a different number of places						
18	Decimals	Multiplying decimals by 10, 100 and 1000						
19	Decimals	Multiplying decimals by whole numbers						
20	Decimals	Dividing decimals by 10, 100 and 1000						
21	Decimals	Dividing decimal fractions by whole numbers						
22	Decimals	Dividing numbers by a decimal fraction						
23	Percentages	Changing fractions and decimals to percentages using tenths and hundredths						
24	Percentages	Changing percentages to fractions and decimals						
25	Percentages	One quantity as a percentage of another						
26	Percentages	Calculating Percentages and Fractions of Quantities						
27	Fractions	Adding and subtracting fractions with the same denominator						
28	Fractions	Improper fractions						
29	Fractions	Comparing and ordering fractions greater than (>) 1						
30	Fractions	Adding and subtracting fractions with different denominators						
31	Fractions	Multiplying fractions by whole numbers						
32	Fractions	Fractions of whole numbers						
33	Fractions	Multiplying and dividing to obtain equivalent fractions						
34	Fractions	Reducing fractions to lowest equivalent form						
35	Fractions	Finding reciprocals of fractions and mixed numbers (mixed numerals)						
36	Fractions	Dividing fractions						
37	Fractions	Dividing mixed numbers (mixed numerals)						

38	Fractions	Multiplying fractions						
39	Fractions	Multiplying mixed numbers (mixed numerals)						
40	Rules properties	Using Order of Operation procedures (BIDMAS) with Fractions						
41	Area	Introducing the rules for finding the area of a rectangle and a parallelogram.						
42	Area	Finding the area of a triangle and other composite shapes.						
43	Area	Larger areas: square metre, hectare, square kilometre.						
44	Volume	Introducing the formula for volume.						
45	Volume	Using the cubic metre to measure volume.						
46	Volume	Solving Problems about Volume – Part 1.						
47	Volume	Solving Problems about Volume – Part 2.						
48	Capacity	Converting between volume and capacity using millilitres and litres						
49	Weight/mass	The tonne – converting units and problems						
50	Data	Bar Charts						
51	Data	Line graphs.						
52	Data	Pie and bar graphs.						
53	Algebraic expressions	Algebraic expressions.						
54	Algebraic expressions	Substitution into algebraic expressions.						
55	Algebraic expressions	Directed numbers: addition and subtraction.						
56	Algebraic expressions	Directed numbers: multiplication and division.						
57	Algebraic expressions	Simplifying algebraic expressions: adding like terms.						
58	Algebraic expressions	Simplifying algebraic Expressions: subtracting like terms.						
59	Algebraic expressions	Simplifying Algebraic expressions: combining addition and subtraction.						
60	Algebraic expressions	Simplifying algebraic expressions: multiplication						
61	Algebraic expressions	Simplifying algebraic expressions: division						
62	Algebraic expressions	Expanding algebraic expressions: multiplication						
63	Algebraic expressions	Expanding algebraic expressions: negative multiplier						
64	Algebraic expressions	Expanding and simplifying algebraic expressions						
65	Algebraic equations	Solving equations containing addition and subtraction						
66	Algebraic equations	Solving equations containing multiplication and division						
67	Algebraic equations	Solving two step equations						
68	Geometry-angles	Measuring angles						
69	Geometry-angles	Adjacent angles						
70	Geometry-angles	Complementary and supplementary angles						
71	Geometry-angles	Vertically opposite angles						
72	Geometry-angles	Angles at a Point.						
73	Geometry-angles	Parallel Lines.						
74	Geometry-problems	Additional questions involving parallel lines						
75	Geometry-triangles	Angle sum of a triangle						

76	Special triangles	Special triangles
77	Geometry-quadrilaterals	Quadrilaterals
78	Geometry-constructions	Geometric constructions
79	Sign word problems	Solving Word Problems by recognising Sign Words
80	Equations	Problem solving strategies
81	Number problems	Problems with numbers.
82	Money	Problems involving money
83	Length	Problems with length.
84	Mass	Problems with mass.
85	Area	Problems with area.
86	Volume/capacity	Problems with volume/capacity.
87	Exam	Exam – Year 7

Germany Year 8 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 8
2	Decimals	Dividing decimal fractions by whole numbers
3	Decimals	Dividing numbers by a decimal fraction
4	Fractions	Multiplying fractions
5	Fractions	Multiplying mixed numbers (mixed numerals)
6	Fractions	Finding reciprocals of fractions and mixed numbers (mixed numerals)
7	Fractions	Dividing fractions
8	Fractions	Dividing mixed numbers (mixed numerals)
9	Rules properties	Using Order of Operation procedures (BIDMAS) with Fractions
10	Percentages	Changing percentages to fractions and decimals
11	Percentages	One quantity as a percentage of another
12	Percentages	Calculating Percentages and Fractions of Quantities
13	Algebraic expressions	Algebraic expressions.
14	Algebraic expressions	Substitution into algebraic expressions.
15	Algebraic expressions	Directed numbers: addition and subtraction.
16	Algebraic expressions	Directed numbers: multiplication and division.
17	Algebraic expressions	Simplifying algebraic expressions: adding like terms.
18	Algebraic expressions	Simplifying algebraic Expressions: subtracting like terms.
19	Algebraic expressions	Simplifying Algebraic expressions: combining addition and subtraction.
20	Algebraic expressions	Simplifying algebraic expressions: multiplication
21	Algebraic expressions	Simplifying algebraic expressions: division
22	Algebraic expressions	Expanding algebraic expressions: multiplication
23	Algebraic expressions	Expanding algebraic expressions: negative multiplier
24	Algebraic expressions	Expanding and simplifying algebraic expressions
25	Algebra-highest common factor	Highest common factor.

26	Algebraic equations	Solving equations containing addition and subtraction
27	Algebraic equations	Solving equations containing multiplication and division
28	Algebraic equations	Solving two step equations
29	Algebraic equations	Solving equations containing binomial expressions
30	Algebraic equations	Equations involving grouping symbols.
31	Area	Introducing the rules for finding the area of a rectangle and a parallelogram.
32	Area	Finding the area of a triangle and other composite shapes.
33	Area	Area of a circle.
34	Volume	Finding the volume of prisms
35	Geometry-angles	Measuring angles
36	Geometry-angles	Adjacent angles
37	Geometry-angles	Complementary and supplementary angles
38	Geometry-angles	Vertically opposite angles
39	Geometry-angles	Angles at a Point.
40	Geometry-angles	Parallel Lines.
41	Geometry-problems	Additional questions involving parallel lines
42	Geometry-triangles	Angle sum of a triangle
43	Geometry-triangles	Exterior angle theorem
44	Special triangles	Special triangles
45	Geometry-quadrilaterals	Quadrilaterals
46	Geometry-constructions	Geometric constructions
47	Geometry problems	More difficult exercises involving parallel lines
48	Geometry-reasoning	Further difficult exercises involving formal reasoning
49	Similar triangles	Similar triangles
50	Pythagoras	Find the hypotenuse
51	Pythagoras	Pythagorean triples
52	Pythagoras	Find the hypotenuse Part 2
53	Pythagoras	Calculating a leg of a right-angled triangle
54	Statistics	Frequency distribution table
55	Statistics	Frequency histograms and polygons
56	Statistics	Relative frequency
57	Statistics	The range.
58	Statistic-probability	The mode
59	Statistic-probability	The mean
60	Statistic-probability	The median
61	Statistic-probability	Probability of Simple Events
62	Exam	Exam – Year 8

Germany Year 9 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 9
2	Algebraic expressions	Expanding and simplifying algebraic expressions
3	Algebra-highest common factor	Highest common factor.
4	Algebraic equations	Solving two step equations

5	Algebraic equations	Solving equations containing binomial expressions						
6	Algebraic equations	Equations involving grouping symbols.						
7	Algebra-factorising	Simplifying easy algebraic fractions.						
8	Rules for indices/exponents	Adding indices when multiplying terms with the same base						
9	Rules for indices/exponents	Subtracting indices when dividing terms with the same base						
10	Rules for indices/exponents	Multiplying indices when raising a power to a power						
11	Rules for indices/exponents	Multiplying indices when raising to more than one term						
12	Rules for indices/exponents	Terms raised to the power of zero						
13	Rules for indices/exponents	Negative Indices						
14	Algebraic fractions	Simplifying algebraic fractions using the index laws.						
15	Scientific notation	Scientific notation with larger numbers						
16	Scientific notation	Scientific notation with small numbers						
17	Scientific notation	Changing scientific notation to numerals						
18	Area	Area of a circle.						
19	Area	Area of a trapezium.						
20	Area	Area of a rhombus.						
21	Area	Area of regular polygons and composite figures.						
22	Surface area	Surface area of a cube/rectangular prism.						
23	Surface area	Surface area of a triangular/trapezoidal prism.						
24	Surface area	Surface area of a cylinder and sphere.						
25	Volume	Volume of a cylinder and sphere.						
26	Statistics	Frequency distribution table						
27	Statistics	Frequency histograms and polygons						
28	Statistics	Relative frequency						
29	Statistics	The range.						
30	Statistic-probability	The mode						
31	Statistic-probability	The mean						
32	Statistic-probability	The median						
33	Geometry-problems	Additional questions involving parallel lines						
34	Special triangles	Special triangles						
35	Geometry-quadrilaterals	Quadrilaterals						
36	Geometry-constructions	Geometric constructions						
37	Geometry problems	More difficult exercises involving parallel lines						
38	Geometry-congruence	Congruent triangles, Test 1 and 2						
39	Geometry-congruence	Congruent triangles, Test 3 and 4						
40	Pythagoras	Find the hypotenuse						
41	Pythagoras	Pythagorean triples						
42	Pythagoras	Find the hypotenuse Part 2						
43	Pythagoras	Calculating a leg of a right-angled triangle						
44	Trigonometry-ratios	Trigonometric ratios.						
45	Trigonometry-ratios	Using the calculator.						
46	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 1 Sine].						
47	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 2 Cosine].						
48	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 3 Tangent Ratio].						

49	Trigonometry-ratios	Unknown in the denominator. [Case 4].
50	Trigonometry-compass	Bearings – the compass.
51	Trigonometry-elevation	Angles of elevation and depression.
52	Statistic-probability	Probability of Simple Events
53	Exam	Exam – Year 9

Germany Year 10 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 10
2	Fractions	Multiplying and dividing to obtain equivalent fractions
3	Fractions	Reducing fractions to lowest equivalent form
4	Fractions	Comparing and ordering fractions greater than (>) 1
5	Fractions	Subtracting fractions from whole numbers
6	Fractions	Adding and subtracting fractions with the same denominator
7	Fractions	Adding and subtracting fractions with different denominators
8	Fractions	Multiplying fractions by whole numbers
9	Fractions	Multiplying fractions
10	Fractions	Multiplying mixed numbers (mixed numerals)
11	Fractions	Finding reciprocals of fractions and mixed numbers (mixed numerals)
12	Fractions	Dividing fractions
13	Fractions	Dividing mixed numbers (mixed numerals)
14	Rules properties	Using Order of Operation procedures (BIDMAS) with Fractions
15	Percentages	Calculating Percentages and Fractions of Quantities
16	Algebraic equations	Solving equations containing binomial expressions
17	Decimals	Adding decimals to two decimal places
18	Decimals	Subtracting decimals to two decimal places
19	Decimals	Using decimals – shopping problems
20	Decimals	Using decimals to record length
21	Decimals	Decimals to three decimal places
22	Decimals	Adding decimals with a different number of decimal places
23	Decimals	Subtracting decimals with a different number of places
24	Decimals	Multiplication of decimals by decimals to two decimal places
25	Decimals	Dividing decimals by 10, 100 and 1000
26	Decimals	Dividing decimal fractions by whole numbers
27	Decimals	Dividing numbers by a decimal fraction
28	Percentages	Introduction to percentages, including relating common fractions to percentages
29	Percentages	Changing fractions and decimals to percentages using tenths and hundredths

30	Percentages	Changing percentages to fractions and decimals						
31	Percentages	One quantity as a percentage of another						
32	Algebraic equations	Equations involving grouping symbols.						
33	Algebraic equations	Equations involving fractions.						
34	Algebra-inequalities	Solving Inequalities.						
35	Algebra-factorising	Simplifying easy algebraic fractions.						
36	Rules for indices/exponents	Adding indices when multiplying terms with the same base						
37	Rules for indices/exponents	Subtracting indices when dividing terms with the same base						
38	Rules for indices/exponents	Multiplying indices when raising a power to a power						
39	Rules for indices/exponents	Multiplying indices when raising to more than one term						
40	Rules for indices/exponents	Terms raised to the power of zero						
41	Rules for indices/exponents	Negative Indices						
42	Algebraic fractions	Simplifying algebraic fractions using the index laws.						
43	Fractional indices/exponents	Fractional indices						
44	Scientific notation	Scientific notation with larger numbers						
45	Scientific notation	Scientific notation with small numbers						
46	Scientific notation	Changing scientific notation to numerals						
47	Significant figures	Significant figures						
48	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 3 Tangent Ratio].						
49	Trigonometry-ratios	Unknown in the denominator. [Case 4].						
50	Trigonometry-compass	Bearings – the compass.						
51	Trigonometry-elevation	Angles of elevation and depression.						
52	Trigonometry-practical	Trigonometric ratios in practical situations.						
53	Trigonometry- ratios	Using the trigonometric ratios to find an angle in a right-angled triangle.						
54	Trigonometry-ratios	Using the calculator to find an angle given a trigonometric ratio.						
55	Geometry-problems	Additional questions involving parallel lines						
56	Geometry-quadrilaterals	Quadrilaterals						
57	Geometry-constructions	Geometric constructions						
58	Geometry-reasoning	Further difficult exercises involving formal reasoning						
59	Geometry-congruence	Congruent triangles, Test 1 and 2						
60	Geometry-congruence	Congruent triangles, Test 3 and 4						
61	Geometry-congruence	Proofs and congruent triangles.						
62	Similar triangles	Using similar triangles to calculate lengths						
63	Overlapping triangles	Examples involving overlapping triangles						
64	Geometry – triangles	Triangle inequality theorem						
65	Area	Area of a trapezium.						
66	Area	Area of a rhombus.						
67	Area	Area of a circle.						
68	Area	Area of regular polygons and composite figures.						
69	Surface area	Surface area of a cube/rectangular prism.						
70	Surface area	Surface area of a triangular/trapezoidal prism.						
71	Surface area	Surface area of a cylinder and sphere.						
72	Surface area	Surface area of pyramids						

73	Surface area	Surface area of cones
74	Surface area	Surface area of composite solids
75	Volume	Volume of pyramids and cones.
76	Volume	Composite solids.
77	Coordinate Geometry-the plane	Distance formula.
78	Coordinate Geometry-midpoint, slope	Mid-point formula
79	Coordinate Geometry-gradient	Gradient
80	Coordinate Geometry-gradient	Gradient formula.
81	Coordinate Geometry-straight line	The straight line.
82	Coordinate Geometry-slope, etc.	Lines through the origin.
83	Coordinate Geometry-equation of line	General form of a line and the x and y Intercepts.
84	Coordinate Geometry-intercept	Slope intercept form of a line.
85	Coordinate Geometry-point slope	Point slope form of a line
86	Statistics	Frequency distribution table
87	Statistic-probability	Cumulative frequency
88	Statistic-probability	Calculating the median from a frequency distribution
89	Statistic-probability	Tree diagrams – not depending on previous outcomes
90	Statistic-probability	Tree diagrams – depending on previous outcomes
91	Exam	Exam – Year 10

Germany Year 11 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 11
2	Statistics	Frequency distribution table
3	Statistics	Frequency histograms and polygons
4	Statistics	Relative frequency
5	Statistics	The range.
6	Statistic-probability	The mode
7	Statistic-probability	The mean
8	Statistic-probability	The median
9	Statistic-probability	Cumulative frequency
10	Statistic-probability	Calculating the median from a frequency distribution
11	Statistics	Stem and Leaf Plots along with Box and Whisker Plots
12	Area	Finding the area of a triangle and other composite shapes.
13	Area	Larger areas: square metre, hectare, square kilometre.
14	Area	Area of a trapezium.
15	Area	Area of a rhombus.
16	Area	Area of a circle.
17	Surface area	Surface area of a cube/rectangular prism.
18	Surface area	Surface area of a triangular/trapezoidal prism.
19	Surface area	Surface area of pyramids
20	Capacity	Converting between volume and capacity using millilitres and litres
21	Weight/mass	The tonne – converting units and problems

22	Volume	Finding the volume of prisms						
23	Volume	Volume of a cylinder and sphere.						
24	Volume	Volume of pyramids and cones.						
25	Pythagoras	Find the hypotenuse						
26	Pythagoras	Pythagorean triples						
27	Pythagoras	Find the hypotenuse Part 2						
28	Pythagoras	Calculating a leg of a right-angled triangle						
29	Trigonometry-ratios	Trigonometric ratios.						
30	Trigonometry-ratios	Using the calculator.						
31	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 1 Sine].						
32	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 2 Cosine].						
33	Trigonometry-ratios	Using the trigonometric ratios to find unknown length. [Case 3 Tangent Ratio].						
34	Trigonometry-ratios	Unknown in the denominator. [Case 4].						
35	Trigonometry-compass	Bearings – the compass.						
36	Trigonometry-elevation	Angles of elevation and depression.						
37	Trigonometry-practical	Trigonometric ratios in practical situations.						
38	Trigonometry-ratios	Using the calculator to find an angle given a trigonometric ratio.						
39	Trigonometry- ratios	Using the trigonometric ratios to find an angle in a right-angled triangle.						
40	Trigonometry-exact ratios	Trigonometric ratios of 30., 45. and 60. – exact ratios.						
41	Scientific notation	Scientific notation with larger numbers						
42	Scientific notation	Scientific notation with small numbers						
43	Scientific notation	Changing scientific notation to numerals						
44	Significant figures	Significant figures						
45	Algebraic expressions	Expanding algebraic expressions: negative multiplier						
46	Algebraic expressions	Expanding and simplifying algebraic expressions						
47	Algebraic expressions-products	Products in simplification of algebraic expressions						
48	Algebraic equations	Solving two step equations						
49	Algebraic equations	Solving equations containing binomial expressions						
50	Algebraic equations	Equations involving grouping symbols.						
51	Algebraic equations	Equations involving fractions.						
52	Algebra-factorising	Simplifying easy algebraic fractions.						
53	Algebraic fractions	Simplifying algebraic fractions using the index laws.						
54	Algebra- formulae	Equations resulting from substitution into formulae.						
55	Simultaneous equns	Simultaneous equations						
56	Coordinate Geometry-straight line	The straight line.						
57	Coordinate Geometry-slope, etc.	Lines through the origin.						
58	Coordinate Geometry-intercept	Slope intercept form of a line.						
59	Co-ordinate Geometry-Intercept form	Intercept form of a straight line: find the equation when given x and y						
60	Similar triangles	Similar triangles						
61	Similar triangles	Using similar triangles to calculate lengths						
62	Overlapping triangles	Examples involving overlapping triangles						
63	Statistic-probability	Probability of Simple Events						
64	Statistic-probability	Rolling a pair of dice						

65	Statistic-probability	Experimental probability
66	Statistic-probability	The complementary result ..
67	Statistic-probability	P[A or B] When A and B are both mutually and NOT mutually exclusive
68	Sequences and Series-Compound interest	Compound interest
69	Exam	Exam – Year 11

Germany Year 12 Mathematics

#	TOPIC	TITLE
1	Self Assessment	Self Assessment – Year 12
2	Statistics – grouped data	Calculating mean, mode and median from grouped data
3	Statistics – Range and dispersion	Range as a measure of dispersion
4	Statistics – Spread	Measures of spread
5	Statistics – Standard deviation	Standard deviation applications
6	Statistics – Standard deviation	Normal distribution
7	Statistics – Interquartile range	Measures of spread: the interquartile range
8	Statistics	Scatter Diagrams
9	Area	Area of regular polygons and composite figures.
10	Volume	Composite solids.
11	Surface area	Surface area of a cylinder and sphere.
12	Surface area	Surface area of cones
13	Surface area	Surface area of composite solids
14	Trigonometry-cosine rule	The cosine rule to find an unknown side. [Case 1 SAS].
15	Trigonometry-cosine rule	The cosine rule to find an unknown angle. [Case 2 SSS].
16	Trigonometry-sine rule	The sine rule to find an unknown side. Case 1.
17	Trigonometry-sine rule	The sine rule to find an unknown angle. Case 2.
18	Trigonometry-areas	The area formula
19	Statistic-probability	Tree diagrams – not depending on previous outcomes
20	Statistic-probability	Tree diagrams – depending on previous outcomes
21	Statistic-probability	Counting techniques and ordered selections – permutations
22	Statistic-probability	Unordered selections – combinations
23	Algebra- formulae	Changing the subject of the formula.
24	Coordinate geometry	Solve by graphing
25	Exam	Exam – Year 12