

# TAX 101

## WA Senior Curriculum Mathematics

### Tax 101 - Activity 1: What is tax and why do we need it? Years 11-12 Task

<b>Mathematics Essential Year 11</b>	<b>1.4.1</b> interpret information presented in graphs <b>1.4.3</b> discuss and interpret graphs found in the media and in factual sheets <b>1.4.4</b> determine which type of graph is the best one to display a dataset <b>1.4.5</b> use spreadsheets to tabulate and graph data <b>2.2.1</b> review calculating a percentage of a given amount <b>2.2.2</b> review one amount expressed as a percentage of another
<b>Mathematics Applications Year 11</b>	<b>1.1.2</b> calculate payments based on government allowances and pensions <b>2.3.10</b> interpret piece-wise linear and step graphs used to model practical situations

### Tax 101 - Activity 2: Tax: Who, what, how and why

<b>Mathematics Essential Year 11</b>	<b>1.1.3</b> understand the meaning and magnitude of numbers involved, including fractions, percentages and the significance of place value after the decimal point <b>1.1.6</b> choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems <b>1.1.12</b> use a calculator appropriately and efficiently for multi-step calculations <b>1.1.13</b> calculate a percentage of a given amount, using mental/written strategies or technology when appropriate <b>1.1.14</b> determine one amount expressed as a percentage of another <b>1.1.15</b> apply percentage increases and decreases <b>1.4.4</b> ascertain the reasonableness of answers, in terms of context, to arithmetic calculations <b>1.4.2</b> interpret information presented in two-way tables 1
<b>Mathematics Applications Year 11</b>	<b>2.3.10</b> interpret piece-wise linear and step graphs used to model practical situations

### Tax 101 - Activity 4: The Budget: taxes and spending Years 11-12 Task

<b>Mathematics Applications Year 11</b>	<b>2.3.10</b> interpret piece-wise linear and step graphs used to model practical situations
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### Tax 101 - Interactive: You make the decision

<b>Mathematics Essential Year 11</b>	<b>1.1.3</b> understand the meaning and magnitude of numbers involved, including fractions, percentages and the significance of place value after the decimal point <b>1.1.6</b> choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems <b>1.1.12</b> use a calculator appropriately and efficiently for multi-step calculations
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# YOUR TAX

WA Senior Curriculum  
Mathematics

## Your Tax - Activity 1: Income and income tax Years 11-12 Task

<b>Mathematics Essential Year 11</b>	<b>1.4.2</b> interpret information presented in two-way tables
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## Your Tax - Activity 1: Income and income tax Years 11-12 Task

<b>Mathematics Essential Year 11</b>	<b>1.1.6</b> choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems <b>1.1.12</b> use a calculator appropriately and efficiently for multi-step calculations <b>2.2.1</b> review calculating a percentage of a given amount <b>2.2.2</b> review one amount expressed as a percentage of another
<b>Mathematics Applications Year 11</b>	<b>1.1.7</b> calculate the dividend paid on a portfolio of shares given the percentage dividend or dividend paid for each share, and compare share values by calculating a price-to-earnings ratio

## Your Tax - Activity 2: Working and paying tax

<b>Mathematics Essential Year 11</b>	<b>1.1.4</b> ascertain the reasonableness of answers, in terms of context, to arithmetic calculations <b>1.1.6</b> choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems <b>1.1.12</b> use a calculator appropriately and efficiently for multi-step calculations <b>1.1.13</b> calculate a percentage of a given amount, using mental/written strategies or technology when appropriate
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## Your Tax - Activity 4: Calculating tax due

<b>Mathematics Essential Year 11</b>	<b>1.1.6</b> choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems <b>1.1.12</b> use a calculator appropriately and efficiently for multi-step calculations <b>1.1.13</b> calculate a percentage of a given amount, using mental/written strategies or technology when appropriate
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**Your Tax - Activity 5: What other taxes do I have to pay?  
Years 11-12 Task**

<b>Mathematics Essential Year 11</b>	<b>1.1.13</b> calculate a percentage of a given amount, using mental/written strategies or technology when appropriate <b>1.1.14</b> determine one amount expressed as a percentage of another <b>2.2.4</b> calculate simple interest <b>2.1.7</b> identify the mode and calculate other measures of central tendency, the arithmetic mean and the median, using technology when appropriate
<b>Mathematics Applications Year 11</b>	<b>1.1.5</b> apply percentage increase or decrease in various contexts

**Your Tax - Activity 6: Fixing a tax problem**

<b>Mathematics Essential Year 11</b>	<b>2.2.4</b> calculate simple interest
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# BUSINESS TAX

## WA Senior Curriculum Mathematics

### Business Tax - Activity 2: Business structures

<b>Mathematics Essential Year 11</b>	<b>1.1.4</b>	ascertain the reasonableness of answers, in terms of context, to arithmetic calculations
	<b>1.1.6</b>	choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems
	<b>1.1.12</b>	use a calculator appropriately and efficiently for multi-step calculations
	<b>1.1.13</b>	calculate a percentage of a given amount, using mental/written strategies or technology when appropriate

### Business Tax - Activity 4: Explaining business taxes

<b>Mathematics Essential Year 11</b>	<b>1.1.14</b>	determine one amount expressed as a percentage of another
	<b>1.1.15</b>	apply percentage increases and decreases
	<b>1.4.1</b>	interpret information presented in graphs
	<b>1.4.2</b>	interpret information presented in two way tables

<b>Mathematics Applications Year 11</b>	<b>1.1.5</b>	apply percentage increase or decrease in various contexts
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### Business Tax - Activity 5: The goods and services tax (GST)

<b>Mathematics Essential Year 11</b>	<b>1.1.6</b>	choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems
	<b>1.1.4</b>	ascertain the reasonableness of answers, in terms of context, to arithmetic calculations
	<b>1.1.12</b>	use a calculator appropriately and efficiently for multi-step calculations
	<b>1.1.13</b>	calculate a percentage of a given amount, using mental/written strategies or technology when appropriate
	<b>1.1.14</b>	determine one amount expressed as a percentage of another

<b>Mathematics Applications Year 11</b>	<b>1.1.5</b>	apply percentage increase or decrease in various contexts
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### Business Tax - Activity 5: The goods and services tax (GST)

#### Years 11-12 Task

<b>Mathematics Essential Year 11</b>	<b>1.1.4</b>	ascertain the reasonableness of answers, in terms of context, to arithmetic calculations
	<b>1.1.6</b>	choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems
	<b>1.1.12</b>	use a calculator appropriately and efficiently for multi-step calculations
	<b>1.1.13</b>	calculate a percentage of a given amount, using mental/written strategies or technology when appropriate
	<b>1.1.15</b>	apply percentage increases and decreases

<b>Mathematics Applications Year 11</b>	<b>1.1.5</b>	apply percentage increase or decrease in various contexts
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### Super - Activity 1: What is superannuation?

<b>Mathematics Essential Year 11</b>	<b>1.4.1</b>	interpret information presented in graphs
	<b>1.4.2</b>	interpret information presented in two-way tables
<b>Mathematics Applications</b>	<b>4.1.2</b>	describe time series plots by identifying features such as trend (long term direction), seasonality (systemic calendar-related movements), and irregular fluctuations (unsystematic, short term fluctuations), and recognize when there are outliers

### Super - Activity 2: Where does super money come from?

<b>Mathematics Essential Year 11</b>	<b>1.1.4</b>	ascertain the reasonableness of answers, in terms of context, to arithmetic calculations
	<b>1.1.6</b>	choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems
	<b>1.1.12</b>	use a calculator appropriately and efficiently for multi-step calculations
	<b>1.1.13</b>	calculate a percentage of a given amount, using mental/written strategies or technology when appropriate
<b>Mathematics Applications</b>	<b>1.1.1</b>	calculate weekly or monthly wage from an annual salary, wages from an hourly rate including situations involving overtime and other allowances and earnings based on commission or piecework

### Super - Activity 3: What do I need to do about super?

<b>Mathematics Essential Year 11</b>	<b>1.1.6</b>	choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems
	<b>1.1.12</b>	use a calculator appropriately and efficiently for multi-step calculations
	<b>1.2.2</b>	substitute values for the variables in a mathematical formula in given form to calculate the value of the subject of the formula
	<b>2.2.4</b>	calculate simple interest
	<b>4.3.2</b>	understand the concept of compound interest as a recurrence relation
	<b>4.3.4</b>	use technology to calculate the future value of a compound interest loan or investment and the total interest paid or earned
<b>Mathematics Applications</b>	<b>4.3.5</b>	use technology to compare, numerically and graphically, the growth of simple interest and compound interest loans and investments
	<b>1.1.5</b>	apply percentage increase or decrease in various contexts
	<b>4.2.1</b>	use a recurrence relation to model a compound interest loan or investment, and investigate (numerically or graphically) the effect of the interest rate and the number of compounding periods on the future value of the loan or investment

**Super - Activity 3: What do I need to do about super?****Years 11-12 Task**

<b>Mathematics Essential Year 11</b>	<b>1.1.6</b>	choose and use addition, subtraction, multiplication and division, or combinations of these operations, to solve practical problems
	<b>1.1.14</b>	determine one amount expressed as a percentage of another
<b>Mathematics Applications</b>	<b>1.1.1</b>	calculate weekly or monthly wage from an annual salary, wages from an hourly rate including situations involving overtime and other allowances and earnings based on commission or piecework

**Super - Activity 4: How do I choose a super fund?**

<b>Mathematics Essential Year 11</b>	<b>1.4.2</b>	interpret information presented in two-way tables
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**Super - Activity 4: How do I choose a super fund?****Years 11-12 Task**

<b>Mathematics Essential Year 11</b>	<b>1.2.2</b>	substitute values for the variables in a mathematical formula in given form to calculate the value of the subject of the formula
	<b>1.4.1</b>	interpret information presented in graphs
	<b>1.4.6</b>	draw a line graph to represent any data that demonstrates a continuous change
	<b>2.1.7</b>	identify the mode and calculate other measures of central tendency, the arithmetic mean and the median, using technology when appropriate
	<b>4.3.4</b>	use technology to calculate the future value of a compound interest loan or investment and the total interest paid or earned
	<b>4.3.2</b>	understand the concept of compound interest as a recurrence relation
	<b>4.3.3</b>	use technology to calculate the future value of a compound interest loan or investment and the total interest paid or earned
	<b>4.3.4</b>	use technology to compare, numerically and graphically, the growth of simple interest and compound interest loans and investments
<b>Mathematics Applications</b>	<b>4.3.5</b>	use technology and a recurrence relation to model a reducing balance loan
	<b>3.2.8</b>	use geometric sequences to model and analyse (numerically, or graphically only) practical problems involving geometric growth and decay
	<b>4.2.1</b>	use a recurrence relation to model a compound interest loan or investment, and investigate (numerically or graphically) the effect of the interest rate and the number of compounding periods on the future value of the loan or investment
<b>Mathematical Methods</b>	<b>4.2.3</b>	with the aid of a calculator or computer-based financial software, solve problems involving compound interest loans
	<b>2.2.8</b>	establish and use the formula for the sum of the first $n$ terms of a geometric sequence
	<b>2.2.9</b>	use geometric sequences in contexts involving geometric growth and decay such as compound interest