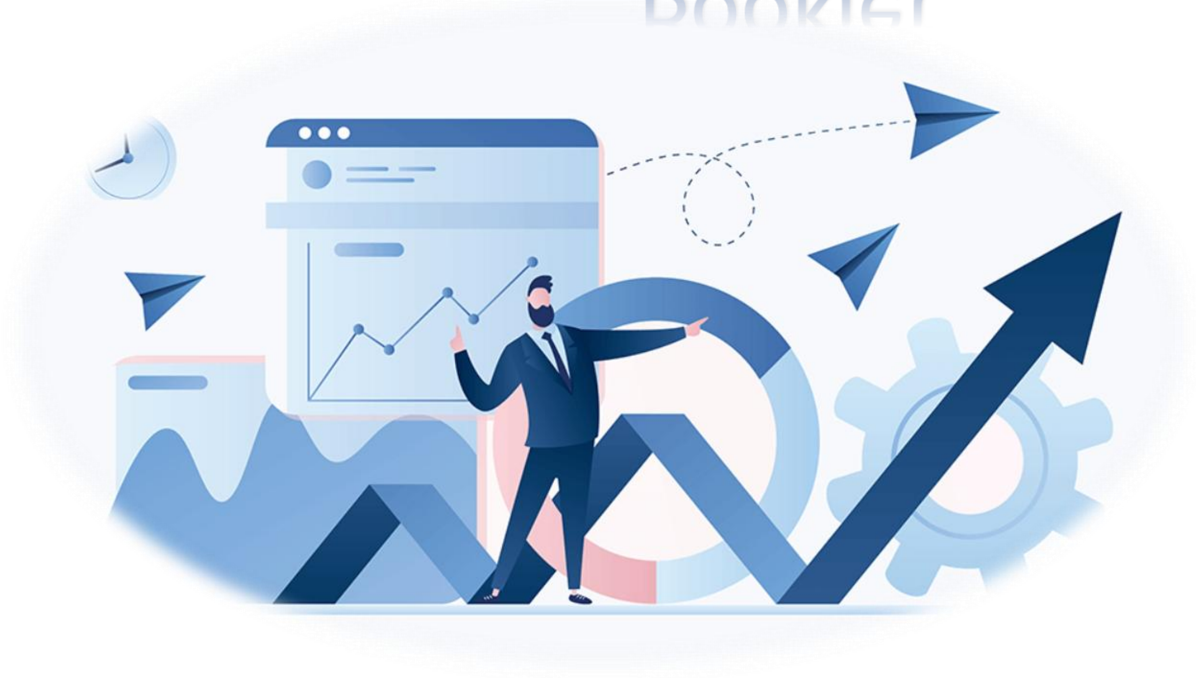
Finance & Data Analytics Transition Booklet



Financial Studies Preparatory Tasks

Please complete each of the tasks set out in the rest of this transition pack and bring your answers and/or findings with you to the first lesson in September if you join the course.

Task 1: Key Terms

As with all subjects, financial studies will introduce you to lots of key terms, many of which are likely to be new to you. In the table below, some of the key terms introduced during the first year of the course are listed. Find definitions of each of the terms. Once you have done this create a glossary containing the terms and their meanings.

The glossary you create can be a reference document to be used later, so make sure it is well presented and clearly set out.

Current Account	**Consumer Price Index**	**Budget**
Inflation	**Income Tax**	**Creditor**
Assets	**Tax Year**	**Debtor**
Mortgage	**P45**	**Economic Boom**
Interest Rate	**P60**	**Bankruptcy**
Recession	**Financial Footprint**	**Pension**
Standing Order	**Payday loans**	**National Insurance**
AER	**Store card**	**Tax Return**
APR	**Premium Bond**	**Personal Allowance**
Direct Debit	**Chancellor of the Exchequer**	**Personal Savings Allowance**
Overdraft	**Credit Crunch**	**Notice Account**

Task 2: Personal Finance- Earnings

The financial studies course requires students to be able to research topics and use the findings of the research to explain issues clearly, yet concisely. This next task will help you develop your ability to do this.

In paragraphs of no more than 10 lines, produce an answer to each of the following questions. To answer each question you may need to first do some research around the concept in the question that is highlighted in bold

a) How might a decrease in the UK **personal allowance** affect people in employment?

b) Explain two arguments for the introduction of the **UK living wage.**

c) Explain two arguments against the introduction of the **UK living wage.**

d) How do the **Work Time Regulations 1998** protect people who have jobs in the UK?

e) What will be higher for those in employment, their **gross pay** or their **net pay**? Explain your answer.

Task 3: Personal Finance- Expenditure

Financial studies requires students to be able to provide lots of examples of key financial terms and concepts. This next task will start to develop your ability to do this.

Carry out some research into the following key terms:

- **Mandatory Expenditure**
- **Essential Expenditure**
- **Discretionary Expenditure**

Once you understand the three terms, create a table like the one below and in each column provide as many examples of each type of expenditure as possible.

Examples of Mandatory Expenditure	Examples of Essential Expenditure	Examples of Discretionary Expenditure

Task 4: Financial Products

A lot of the financial studies course covers the different financial products that banks, building societies and insurance firms etc provide, as well as the issues associated with using them.

This task will help you start to understand the issues associated with some of the key financial products that students study during the course.

Research the benefits and drawbacks of the following financial products (*make sure you have first read around each product first and have familiarised yourself with them):*

- **Personal Loans**
- **Payday loans**
- **Overdrafts**
- **Hire Purchase Agreements**
- **Credit Cards**

Create either a presentation or leaflet on the benefits and drawbacks individuals typically face from using each of the five products. Please make sure you explain the benefits and drawbacks in full, rather than in bullet point form.

Task 5: Independent Project

Sixth form courses require students to work well independently in order to be successful and financial studies is no different. This final task is designed to help develop your independent learning skills. It requires you to be totally independent in completing a project linked to one of the topics covered during the course.

Step one: Choose a topic area.	The course requires students to understand the different external factors that can affect the personal finances of individuals. External factors are key influences that are outside the control of an individual. Four external factors that can impact the finances of an individual are listed below. Choose <u>**one**</u> of them: **Inflation** **Interest Rates** **Taxation** **Recession**
Step two: Do some background reading and research around your chosen external factor	• Use of variety of websites to do some reading and research around the chosen external factor to help you gain an understanding of it. • Make sure the sites you use are appropriate *(there's no point using sites and articles that filled with loads of technical terms that you don't understand)* • YouTube can also be a good source for clips.
Step three: Set yourself a specific question	Once you have carried out your research, think of <u>**one**</u> specific question linked to the chosen factor you have researched. This question will be the focus of your project and help you narrow it down and make it achievable. Here are some examples of questions *(you don't have to use these)*: • How has inflation changed overtime in the UK? • What causes inflation? • In what ways does an increase in interest rates affect people? • What are the different taxes that people in the UK pay? • What happens during a recession?
Step four: Collect evidence and information	Carry out some more reading and research. This should be some more focused reading and research to help you answer the specific question you have come up with.
Step five: Produce a project	Present the answer to your question in a style of your choice. There are so many possibilities! For instance you could present your findings and the answer to your question in the form of any of the following: • A newspaper or magazine article • A presentation • A fact file • A blog *(if you're technically minded!)* • A first person account of your findings

Good Website to use for Financial Studies

https://www.moneyadviceservice.org.uk/en

https://www.moneysavingexpert.com/

https://www.which.co.uk/

https://www.bbc.co.uk

https://moneyfacts.co.uk

Thank you for working through the tasks in this transition pack. Doing so will undoubtedly help you make a good start to the financial studies courses.

Please bring all of the work you have completed to your first financial studies lesson. We look forward to seeing you in September and helping you develop your knowledge of finance.

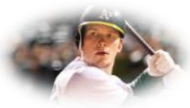
Task 6: Word Search

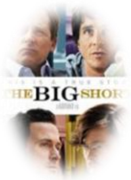
Transition Word Search

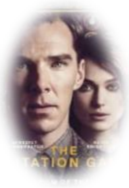
e	a	i	l	i	m	b	n	t	n	e	h	t	a	l	a	w	g	n	e	r	s	m	e
i	o	r	n	a	g	g	o	e	t	s	r	m	a	d	g	h	f	n	i	b	a	t	t
i	c	d	t	d	n	e	t	l	u	t	e	d	l	a	a	e	t	l	i	i	s	v	t
t	f	a	m	p	i	i	a	h	c	l	o	t	e	t	o	g	n	g	a	i	r	c	a
s	p	r	e	a	d	s	h	e	e	t	d	a	t	a	m	o	d	e	l	l	i	n	g
a	e	n	h	m	c	l	t	a	g	e	y	l	a	a	i	a	i	a	t	i	n	i	i
u	n	a	l	t	w	h	m	r	n	a	g	g	i	n	t	l	a	t	d	c	u	p	a
i	e	i	d	s	l	n	i	c	i	a	r	n	e	a	a	s	o	d	d	a	o	t	i
a	i	a	i	o	t	e	t	n	t	n	c	i	v	l	n	e	t	o	o	d	a	r	a
d	t	t	n	l	t	t	t	l	e	m	g	i	a	y	n	e	l	t	e	i	t	d	i
c	i	i	s	m	i	e	r	u	k	l	s	n	l	t	o	k	a	o	e	e	a	i	y
h	a	a	d	n	g	o	e	i	r	u	e	a	a	i	i	r	i	o	o	a	s	r	r
a	r	o	a	e	i	a	i	a	a	c	s	a	d	c	t	r	k	d	l	b	e	a	a
h	s	d	r	a	t	n	h	l	m	a	n	e	r	s	a	e	i	s	n	n	o	i	a
t	e	d	g	d	t	o	i	e	l	o	d	g	e	n	d	d	t	e	n	s	n	u	t
n	i	k	d	i	g	s	g	e	a	e	w	f	e	t	i	u	m	b	e	i	o	i	o
t	l	d	a	h	a	m	a	i	t	a	a	c	a	m	l	n	o	n	a	a	a	u	e
i	r	i	n	t	n	d	n	e	i	d	s	i	e	t	a	d	g	s	a	a	i	a	l
a	e	w	i	e	l	e	a	k	g	f	t	d	g	o	v	a	l	g	l	d	i	g	n
o	g	o	o	e	r	s	n	k	i	l	i	b	i	d	h	n	o	l	l	k	e	v	c
a	n	a	r	s	l	i	r	t	d	s	l	n	t	k	r	c	i	s	i	g	t	s	d
a	g	d	i	l	b	h	a	n	k	t	a	a	d	a	g	y	y	b	o	i	s	a	l
g	b	a	m	e	a	h	t	a	i	t	r	e	t	g	g	a	e	k	n	d	r	t	n
e	l	s	a	i	w	e	b	g	s	n	i	n	l	a	o	e	n	i	i	n	a	i	a

Data Analytics
What if Scenario
Goal Seek
Digital Marketing
Validation
Big Data
Machine Learning
Data Visualisation
Spreadsheet Data Modelling
Boolean
Integer
String
redundancy

Task 7: Data Analytics films to watch

Moneyball 

The Big Short 

The Imitation Game 

Minority Report 

Task 8: Data Analytics exercises

By the end of these exercises, you will be able to:

- Understand the data analytics process
- Perform basic data cleaning and exploration
- Use descriptive statistics
- Create visualizations
- Interpret insights from data

---

1. 📘 Introduction to Data Analytics

Definition:
Data Analytics is the process of examining datasets to draw conclusions about the information they contain.

Types of Data Analytics:

- **Descriptive** – What happened?
- **Diagnostic** – Why did it happen?
- **Predictive** – What will happen?
- **Prescriptive** – What should be done?

Exercise 1:
Match the type of analytics to the scenario:

1. A company reviews last quarter’s sales.
2. A model forecasts next month’s revenue.
3. A dashboard shows customer churn rate.
4. A system recommends inventory restocking.

2. 📈 Descriptive Statistics

Key Metrics:

- Mean, Median, Mode
- Standard Deviation
- Min, Max, Range

Example: Given the salaries: [50000, 48000, 52000, 51000, 49000]

Exercise 2:
Calculate:

- Mean salary
- Median salary
- Salary range

---

3. 📊 Data Visualization

Common Charts:

- Bar Chart
- Line Graph
- Histogram
- Scatter Plot
- Pie Chart

Exercise 3:
Match the chart type to the use case:

1. Showing sales over time
2. Comparing product popularity
3. Displaying age distribution
4. Visualizing correlation between height and weight

4. 🧠 Insight Generation

Tips:

- Look for trends and outliers
- Compare groups
- Ask “why” and “what if” questions

Exercise 4:
You find that customers aged 25–34 spend the most. What could be the reasons? What actions might a business take?