

# Keeping organisational data secure

This planning document is intended to support teachers who are delivering the NPA/PDA Data Science or for students who are learning independently. It also aligns with the Data Skills for Work framework.

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## Version Control

Version number	Purpose/Change	By	Date
1.0	Published by effini	Emma Nylk	11 July 2022

## Lesson Description

<b>Lesson Overview</b>	How organisations keep data secure.  What data rights and responsibilities individuals and organisations have under the law.
<b>Topic</b>	Data Security
<b>Book Chapter(s)</b>	Data Security

<b>NPA level</b>	4, 5, 6
<b>PDA level</b>	7, 8
<b>Data skills for work level</b>	Data management, Core, Data leadership

## Lesson Contents

This lesson consists of:

- A lesson plan (this document)
- A PowerPoint/PDF presentation, 'Keeping organisational data secure'
- Question worksheet (for learners) on 'Keeping organisational data secure' in Excel/PDF
- Answers worksheet (for teachers) on 'Keeping organisational data secure' in Excel/PDF

## Learning Intentions

We will be looking at how organisations keep data secure, specifically,

- What happens if organisations don't keep data secure
- What is GDPR
- What are your data rights under the law
- How encryption and backups keep data safe

## Success Criteria

I can *explain/describe/state* how GDPR supports organisations to manage and secure data.

I can *explain/describe/state* the rights I have as a data subject.

I can *explain/describe/state* the responsibilities an organisation has a data controller.

I can *explain/describe/state* how encryption can be used to manage and secure data.

Learners need to explain/describe/state the success criteria based on the level they are studying at. Please review the lesson requirements to determine the appropriate level for the learners.

## Knowledge Prerequisites

Learners should know:

- what data is
- data can be transformed into valuable information
- data can be used to solve problems and find answers to questions

## Lesson Requirements

	<b>PDA</b>	<b>NPA</b>	<b>Data Skills for work</b>
<b>Qualification</b>	Yes	Yes	Yes
<b>Outcome ID(s)</b>	WD7.2e, WD8.1h	DC4.2d, DC4.1e, DC5.1e, DC5.2d, DS5.2d, DC6.1e, DC6.2d	DM2.1, DM2.2, DM2.3, C1.4, C2.1, C2.2, DL2.2
<b>Outcome description(s)</b>	WD7.2e Legal and ethical considerations  WD8.1h Data management including security,	DC4.2d - Describe simple methods of managing and securing data.  DC4.1e - State the rights and responsibilities of data subjects and data owners  DC5.1e - Describe the rights and responsibilities of data subjects and data owners.  DC5.2d - Explain methods of managing and securing data  DS5.2d - Describe methods of securing and managing data  DC6.1e - Explain the rights and responsibilities of data subjects and data owners  DC6.2d - Explain methods of data management and data security	DM2.1 - Data protection regulation,  DM2.2 - Keeping data secure  DM2.3 - Data sharing and publication  C1.4 – Use and misuse of data by individuals, organisations and society  C2.1 – Vocabulary used in data science and analytics  C2.2 – Different data roles in organisations  DL2.2 – Data roles and skills
<b>Level</b>	7, 8	4, 5, 6	Data management, Core, Data leadership
<b>Software language</b>	N/A	N/A	N/A
<b>Required equipment /software for student</b>	Lesson: PowerPoint/PDF, Worksheet: Excel/PDF	Lesson: PowerPoint/PDF, Worksheet: Excel/PDF	Lesson: PowerPoint/PDF, Worksheet: Excel/PDF

## Task-types

In the worksheet for this lesson, there are up to 6 task-types to that become increasingly challenging to support the students learning. Based on the student's previous knowledge it is possible to select the task-types that are relevant to their stage.

Task-type	Description
<b>1. Recall</b>	To be able to recognise definitions or procedures.
<b>2. Define</b>	To be able to define definitions or procedures.
<b>3. Rephrase</b>	To be able to use their own words to describe definitions or procedures.
<b>4. Apply</b>	To be able to apply definitions or procedures to problem-solving activities.
<b>5. Create</b>	To be able to apply definitions or procedures and create their own solutions to a defined problem.
<b>6. Active</b>	Using knowledge from the lesson which they apply to scenarios they have researched/designed themselves.

## Worksheet

The worksheet associated with this lesson is available either in Excel or as a PDF that can be printed. The answer worksheet is available in both formats too.

Worksheet section ID	Description	Task-type	Number of questions
1.1	Data breaches	Recall	2
1.2	Data breaches	Apply	4
2.1	GDPR	Recall	1
2.2	GDPR	Rephrase	3
2.3	GDPR	Active	1
3.1	Technology to protect data	Recall	1
3.2	Technology to protect data	Rephrase	1
3.3	Technology to protect data	Active	1
<b>Total</b>			<b>14</b>

## How you can use this lesson

This lesson has been created by effini in partnership with Data Education in Schools and Skills Development Scotland.

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## Alternative format

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