

SUMMER INDEPENDENT LEARNING

Group/Subject	BTEC Extended Diploma in Health and Social Care (Year 12 – 13)
Topic	Unit 3 – Anatomy and Physiology Unit 4 - Enquiries into Current Research in Health and Social Care
Hours	15 - 24 hours
To be completed by	This work must be completed and handed in to your subject teacher on the first day of term.

Background/Context

In this final year of your studies at NCB you will be sitting Unit 3 and Unit 4 exams in January 2025. Both exams are mandatory requirements for your qualification.

In order to prepare you for September teaching we have set work which counts towards these units, to be completed over the summer break. The content in here is part of your learning so it must be done as well as you would in a classroom setting.

Unit 3 is a biology/science-based unit, which is the reason why you needed to have passed your GCSE science exams. You will study body systems and physiological disorders amongst other areas in the unit. The exam format is similar to Units 1 and 2, completed in 90 minutes.

Unit 4 requires high level literacy and information processing skills as well as ability to infer, connect, understand and predict. The exam paper contains only 4 questions to be completed in 3 hours.

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- For Unit 3 you need to complete Tasks 1 – 5, using additional paper as needed. Tasks 1 -
 - For Unit 4 you need to complete Task 6 – 10 and Part TWO. BOTH parts are mandatory. You need to complete the work by hand except unless you are entitled to use computer/laptop as part of your access arrangements.

Task 1: Disorders (approx. 3.5 hours)

Over the course of this unit, you will learn about multiple disorders related to different body systems.

- Research, and create posters on all of the following disorders:

Respiratory system: Asthma, Pneumonia, Chronic Obstructive Pulmonary Disorder (COPD)

Cardiovascular system: Stroke, Hypertension, Anaemia and Coronary Heart Disease.

The posters must contain:


- A description of the disorder
- Causes of the disorders
- Key signs and symptoms of the disorders (making links to the relevant body system)

Asthma

What is Asthma?

What causes Asthma?

You now need to annotate the outline of the body with some key signs/symptoms of Asthma. You **MUST** explain how the disorder is specifically causing the symptoms, with clear links to the respiratory system.



Disorders of the respiratory system

Task 2: Respiratory system (approx. 30 mins)

- Complete the table below, to explain the structure and function of the following parts of the respiratory system: Trachea, bronchi, lungs, bronchial tree, and alveoli.

Part	Structure	Function
Trachea		
Bronchi		
Lungs		
Bronchial Tree		
Alveoli		

Task 3: Respiratory system (approx. 30 mins)

Watch the following video: <https://www.youtube.com/watch?v=57byXpOUpSU>.

If you cannot access that specific video, you can find a different one on the same topic.

- Using the space provided below, draw a diagram showing the process of 'Gaseous exchange' and 'Diffusion'

Task 4: Cells (approx. 30 mins)

- Create a set of revision flashcards on the organelles of a cell. You will then use them periodically throughout the holidays to maintain your subject knowledge.

Task 5: Cardiovascular system (approx. 30 mins)

- Sketch/find an image of a cross section of a heart. Label the heart to show the key parts of the heart, and also how blood flows through the heart during the cardiac cycle.

Task 6 – Purpose of Research

The purpose of research is to find out information or gain knowledge. Research is a systematic or orderly procedure that explores issues to establish facts or reach new conclusions.

There are FOUR key purposes of research in health and social care.

- What are they?

1	
2	
3	
4	

Task 7 – Key Terminology/Vocabulary

As part of your learning, you need to have a clear understanding of the key terms used within this Unit.

- Create posters, factsheets or a spider diagrams, explaining the following terms in your own words. ***Copying definitions from the internet or textbook is not allowed.***

- Research article
- Research methods
- Issue
- Data
- Ethical issue
- Research planning
- Research skills
- Reliability
- Validity
- Sampling
- Line of inquiry
- Health and social care practice
- Health and social care provision

Task 8 – Sampling Methods

There are 4 types of sampling methods you need to know about. They are:

- Quota sampling
 - Random sampling
 - Opportunity sampling
 - Systematic sampling
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- Produce a spider diagram which explains each type of sampling and gives TWO examples of each one.

Task 9 - Identifying Source Material

- Using reputable websites, identify TWO examples of research that have been carried out in health care and TWO examples of research in social care within the last five years.

	Name of research projects, the web links and a summary of the research conducted
Health	<u>Research article 1</u> Title of research project: URL link: Summary of the research that has been conducted:

	<p><u>Research article 2</u></p> <p>Title of research project:</p> <p>URL link:</p> <p>Summary of the research that has been conducted:</p>
Social Care	<p><u>Research article 1</u></p> <p>Title of research project:</p> <p>URL link:</p> <p>Summary of the research that has been conducted:</p>

Research article 2

Title of research project:

URL link:

Summary of the research that has been conducted:

Task 10 – Importance of research evidence

- Identify and copy THREE quotes from **reputable** websites/sources from the UK which can support the following statement:

The significance of supporting children and young people in schools with their mental health

- Each quote must be referenced correctly and you will need to produce a short bibliography, using the correct format.

Unit 4 - PART TWO

Instructions

On the next page is a research article for you to read.

- Read the entire document
- Highlight any words/terms you DO NOT understand. Look the up and write down their meaning in language you can understand. Write this next/near to section in the article

Answer the following exam question

Activity 1

How have the different methods referenced in the article been used to research the issue?

In your answer, you should consider:

- suitability of research methods referred to in the article

Smokers encouraged to take part in Stoptober, as they report smoking during the pandemic

Stoptober is back and calling on smokers to join the 2.3 million people who have made quit attempts since the campaign's launch 10 years ago.

20 September 2021



Stoptober is back to launch its 10th mass quit attempt on 1 October, calling on smokers in England to join the 2.3 million others who have made a quit attempt with the campaign since it launched a decade ago in 2012, according to Public Health England's **monitoring evaluation data**.

Over 6 million adults in England still smoke, and it remains the **leading cause of premature death**, with **almost 75,000 preventable deaths a year**. A new nationwide survey of 2,000 current smokers, released today, has found that nearly half (45%) have been smoking more since the first lockdown began. Key reasons reported are due to being bored in the lockdowns (43%) or the COVID-19 pandemic making them more anxious (42%).

More than two-fifths (43%) of smokers surveyed believe that the strength of addiction and/or craving is the biggest obstacle to quitting, followed by the stress of everyday life (42%). More than half of smokers want to quit, and three-quarters (75%) would never have started smoking if they could go back in time. Of those who want to quit, more than half (55%) would like to do so to improve their physical health or to save money (52%).

Data from the monthly **UCL Smoking Toolkit Study** indicates a large increase in smoking among the under-35s since the pandemic – **up from 18% in 2019 to 24% now**.

Multiple benefits to health

The disruptive impact of the pandemic on smoking patterns make this year's Stoptober mass quit attempt more important than ever. Stopping smoking brings multiple benefits to health, some immediate and others that build over time. These include being able to start moving better, being able to breathe more easily and saving money. **The average smoker can save £1,875.60** a year by quitting smoking (based on July 2021 price (£11.46), minus July 2011 price (£6.59), which equals £4.86, or 73.6%).

Stoptober is based on research that if a smoker can make it to 28 days smoke-free, they are 5-times more likely to quit for good. The campaign first launched in 2012 when 1 in 5 adults smoked (19.3%) – this has since **fallen to 1 in 7 in England (13.9%)**.

Stoptober offers a range of free quitting tools including:

- **NHS Quit Smoking app**
- Facebook messenger bot
- **Stoptober Facebook online communities**
- daily emails and SMS
- online Personal Quit Plan, which helps people find a combination of support that's right for them, including expert support from local Stop Smoking Services and stop smoking aids

Scott Crosby, Tobacco Control Programme Manager at Public Health England, said:

Since the pandemic hit we've seen an increase in 18 to 34 year olds taking up smoking, which is why Stoptober is as vital as ever. Now in its 10th year it's supported over 2 million smokers to give quitting a go.

Quitting smoking will not only immediately improve your physical health but also your bank balance. Research shows that if you can make it to 28 days smoke-free then you are 5-times more likely to quit for good.

It's been a tough time over the pandemic for smokers. But the numbers trying to quit is up and the success rate is up. Now is the time to do it! Sign up to Stoptober and make it a success.

Dr Sarah Jarvis, GP and media medic, said:

Smoking is still the leading preventable cause of premature death. Every cigarette smoked damages the lungs and airways, making it harder to breathe. Smoking fills the lungs with toxins which harm the immune system and leave the smoker more vulnerable to infections – something which has been at the forefront of all our minds over the past 18 months.

As a doctor, I urge every smoker to give quitting a go this October – it's never too late to quit – stopping smoking brings immediate benefits to health, including for people with an existing smoking-related disease. There's loads of support available including expert help from local stop smoking services, quit smoking aids and digital tools. You don't need to do this alone.

Leading UK health organisations, including The Asthma UK and the British

Lung Foundation, are joining in the call to get smokers in England to give quitting a go this October by joining Stoptober.

Eluned Hughes, Head of Health Advice at Asthma UK and British Lung Foundation, said:

Quitting smoking is one of the best things anyone can do to improve their overall health. Smoking seriously damages the lungs, putting people at greater risk of developing conditions such as chronic obstructive pulmonary disease (COPD).

It is vital, now more than ever, that people protect their lungs by giving up this deadly habit. No matter how long you have been a smoker, it is never too late to give up, and if you do already have a lung condition, then quitting is one of the best things you can do to help yourself. As Stoptober marks its tenth anniversary, why not take the first step to quitting for good?

Smokers are being urged to join the thousands of people who are stopping smoking this October. For free support to quit search 'Stoptober'.

Hyperlinks are used in the article, to access these links:

Stoptober campaign evaluation - GOV.UK (www.gov.uk)

Adult smoking habits in the UK - Office for National Statistics (ons.gov.uk)

Statistics on Smoking, England 2020 - NHS Digital

Smoking Alcohol Toolkit Study | Institute of Epidemiology & Health Care - UCL – University College London

Top Line Findings - Graphs - Smoking in England

Adult smoking habits in the UK - Office for National Statistics (ons.gov.uk)

Quit smoking - Better Health - NHS (www.nhs.uk)

attitudinal survey results