

KNOWLEDGE ORGANISER



Homelessness

Year 8
Autumn 2

Why Issue-Based Drama?

'Theatre, as the most public of art forms, has a particular part to play in the collective exploration of ideas, values and feelings – as a space and place in which society might be reshaped through the imagination.' (Nicholson 2005: 19)

- Greek Theatre
- Developing insight/understanding/empathy
- Transformation/Change
- Creates discussion
- Sensitive way to approach difficult topic

Individuals often become homeless as a result of extreme personal difficulties, which may take the form of:

- A troubled childhood
- Mental or physical illness
- Involvement in crime, which may have commenced at an early age
- Substance misuse
- Relationship breakdown
- Victimisation by violent crime
- Bankruptcy
- Ejection from the home of a relative or friend
- Eviction from a rented property



crisis

We are the national charity for homeless people. We help people directly out of homelessness and campaign for the changes needed to solve it altogether.

You will be introduced to Epic Theatre

Bertolt Brecht
1898-1956

German playwright, Bertolt Brecht's ideas are very influential. He wanted to make the audience think, and used a range of devices to remind them that they were watching theatre and not real life. This is a good type of theatre to use if you want to provoke your audience. It is a theatre of social change.

- The narration needs to be told in a montage style.
- Techniques to break down the fourth wall, making the audience directly conscious of the fact that they are watching a play.
- Use of a narrator. ...
- Use of songs or music. ...
- Use of technology. ...
- Use of signs. ...
- Use of freeze frames / tableaux .

Other Key Forms of Theatre that you will Explore

Documentary Theatre

Documentary theatre is theatre that uses pre-existing **documentary** material (such as newspapers, government reports, interviews, journals, and correspondences) as source material for stories about real events and people, frequently without altering the text in performance.

Promenade Theatre

As a genre, promenade theatre is extremely versatile. With no formal stage, and the audience and actors occupying the same space, it allows for experimentations with both new and old plays, and explores what the theatrical experience can entail for an audience. In moving the audience around throughout the performance, promenade theatre also pushes boundaries of setting in a way that can't be achieved in regular theatre.

Monologue

Characters express their thoughts through monologues, and use them to deliver important speeches to the audience and other characters. They can be used to share feelings, plans, anxieties—anything that a character needs to communicate that can only be accomplished through speech.

Section 4: Preventing Infections

Hygiene	Hand washing, disinfectants on work surfaces, keeping raw meat away from food
Isolation of infected individuals	Infected individuals kept separate from healthy individuals
Destroying and controlling vectors	By killing or controlling vectors e.g. mosquitos, aphids, rodents etc the spread of disease is reduced
Vaccination	Body is injected with a small amount of inactive pathogen. If you are infected your body has developed immunity to the pathogen.


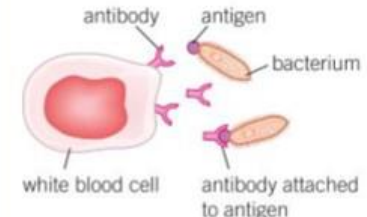
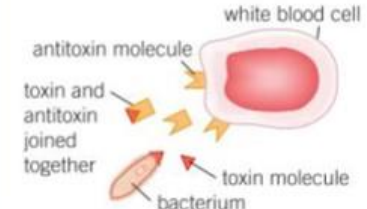
Section 6: Clinical Trials

Trial Stage	Purpose
Preclinical – cells, animals	Test for toxicity and efficacy before testing humans
Healthy volunteers	Very low doses to test for toxicity .
Patients	Larger groups. Test for toxicity , efficacy and dose . Placebos may be used in a double-blind trial .

Clinical Trial Key Terms

Placebo	A drug with no active ingredients , designed to mimic a real drug . Used to test if the effects of a drug on a patient are just psychological .
Double-blind trial	The volunteers do not know which group they are in, and neither do the researchers, until the end of the trial
Toxicity	How harmful the drug is. May have dangerous side effects .
Efficacy	How effective the drug is.
Dose	The amount of the drug given to the patient.

Section 5: Ways in which white blood cells destroy pathogens

Role of white blood cell	How it protects you against disease
Ingesting microorganisms 	Some white blood cells ingest (take in) pathogens, digesting and destroying them so they cannot make you ill.
Producing antibodies 	Some white blood cells produce special chemicals called antibodies. These target particular bacteria or viruses and destroy them. You need a unique antibody for each type of pathogen. When your white blood cells have produced antibodies once against a particular pathogen, they can be made very quickly if that pathogen gets into the body again. This stops you getting the disease twice.
Producing antitoxins 	Some white blood cells produce antitoxins. These counteract (cancel out) the toxins released by pathogens.

Section 7:

Drugs from plants	Traditionally drugs were extracted from plants
Penicillin	Discovered from penicillium mould

Section 1: Monoclonal antibodies

Monoclonal Antibodies

Monoclonal antibodies are identical copies of **one** type of **antibody** produced in a laboratory.

How to produce monoclonal antibodies:

1. A mouse is **injected** with a pathogen
2. White blood cells called **lymphocytes** produce **antibodies**
3. Lymphocytes are removed from the mouse and **fused** with rapidly dividing mouse **tumour cells**
4. The new cells are called **hybridomas**.
5. The hybridomas divide rapidly and release lots of **antibodies** which are then collected

Uses of Monoclonal Antibodies

Used in treatment of diseases and monoclonal antibodies have been developed against the antigens on cancer cells.

Monoclonal antibodies are bound to radioactive substances (or toxic drugs and chemicals) that stop cells growing and dividing.

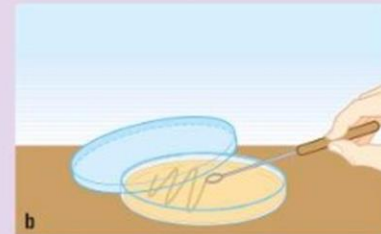
Monoclonal antibodies have side effects and are not as widely used in cancer treatment.

Monoclonal antibodies are used for diagnosis in pregnancy tests, in labs to measure levels of hormones and other chemicals in the blood to detect pathogens and to identify molecules in cells or tissues.

Section 2: Culturing microorganisms in the laboratory



Sterilise the inoculating loop used to transfer microorganisms to the agar by heating it until it is red hot in the flame of a Bunsen and then letting it cool. Do not put the loop down or blow on it as it cools.



Dip the sterilised loop in a suspension of the bacteria you want to grow and use it to make zigzag streaks across the surface of the agar. Replace the lid on the dish as quickly as possible to avoid contamination.



Fix the lid of the Petri dish with adhesive tape to prevent microorganisms from the air contaminating the culture – or microbes from the culture escaping. Do not seal all the way around the edge – as oxygen needs to get into the dish to prevent harmful anaerobic bacteria from growing.



The Petri dish should be labelled and stored upside down to stop condensation falling onto the agar surface.

Section 3: Preventing Bacterial Growth

Bacteria multiply by simple cell division if they have enough nutrients and a suitable temperature

You can investigate the effects of disinfectants and antibiotics on bacterial growth using agar plates and calculating the cross-sectional area of colonies grown or of clear areas of agar

Section 4: More about Plant Diseases

Plants can be infected by a range of viral, bacterial and fungal pathogens as well as insect pests.

We cant detect a plant is diseased by looking for unusual growths, spots or discoloured leaves and malformed leaves and stems.

If a plant disease is suspected then it can be identified by:

Gardening manuals

Gardening websites

Test kits containing monoclonal antibodies

Taking infected plants to a laboratory to identify the pathogen

Monoclonal antibodies are used for diagnosis in pregnancy tests, in labs to measure levels of hormones and other chemicals in the blood to detect pathogens and to identify molecules in cells or tissues.

Section 6: Deficiency of Mineral Ions

Nitrate ions	Needed by plants for protein synthesis and growth. Lack of nitrate ions results in stunted growth of plants.
Magnesium ions	Needed by plants to produce chlorophyll. Lack of magnesium ions results in chlorosis (yellowing of leaves due to lack of chlorophyll)

Section 7: Plant defence responses

Type of plant defence used (mechanical, physical or chemical)	What is the plant being defended against?	Describe the defence being used
Mechanical	Herbivores eating it	Thorns or hairs
Chemical	Pathogens/bacteria Herbivores/animals	The chemical released is antibacterial or poisonous
Physical	Herbivores and pathogen entry	Dead bark coating which falls off
Physical	Insects such as aphids	Waxy cuticle/cellulose cell walls are hard to penetrate



The presence of pests



Stunted growth



Chlorosis



Thorns