The Glitterball (dir. Harley Cokeliss, 1977)

Lesson by James Chester, Teach First

Biology,
Key Stage 3

Using the film *The Glitterball* (1977) to understand what it means for something to be alive according to 21st century biology. To begin with students watch the film while noting down any evidence of signs of the glitterball meeting the criteria that makes something 'alive.'

After deciding what they think the glitterball might be, the students are asked to model animal and plant cells using clay. The students will then create organelles for these cells also out of clay and describe how they have adapted to their functions.

You will need...

Trailer:

Still from the film (provided)

Main Attraction:

Copies the grid provided
A copy of the film *The Glitterball* (1977)

End Credits:

Clay to make models, A3 paper

Lesson Objectives

- Good – List the criteria that make something alive and explain why you think the glitterball is alive or not.
- Better – Model animal cells using clay and create realistic organelles to go inside them
- Perfect – Describe the adaptations of these organelles and how they work.

Curriculum Links

- What the critieria is for something to be determined as living or non-living.
- Cells as the fundamental unit of living organisms.
- The functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts (making equivalents of these organelles in their diagrams).

Activities

TRAILER: The Glitterball

Show students the image of the boys with the glitterball and ask these questions:

- Do you think these balls are alive?
- How can you tell?
- What would they have to do to be classed as alive?

Think, pair, share the ideas and brainstorm on the board.

MAIN ATTRACTION: Alive or not alive? That is the question

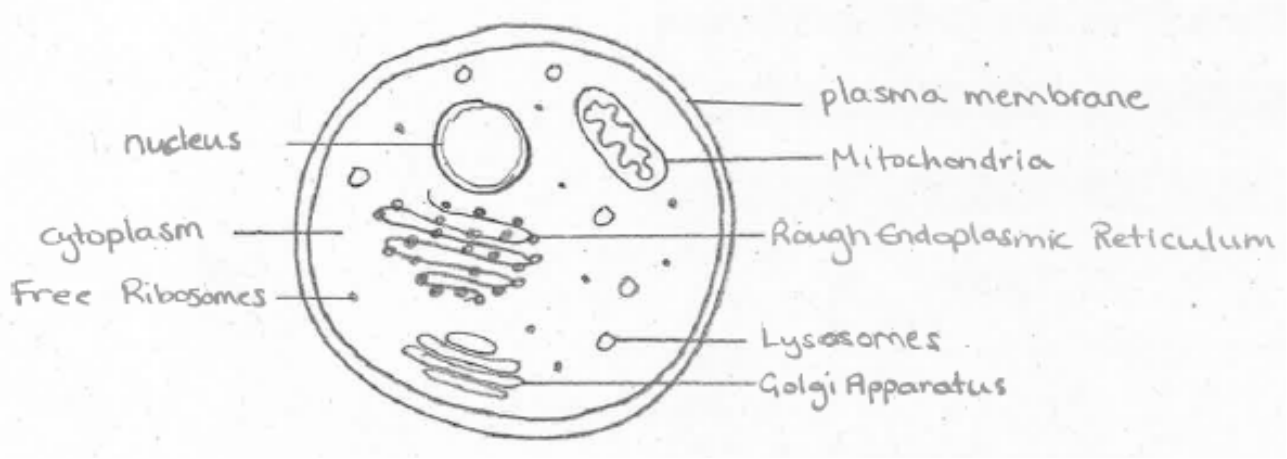
Start the film and provide the students with the grid (provided below). As the film goes along they must note down moments that signify each of the different criteria for MRS. GREN (see below for the table))

The students then need to decide whether the glitterball is alive or not, justifying their reasons.

END CREDITS: Clay Creations

Ask the students what type of cells they think the glitterball has – animal or plant? They then need to create a clay model showing what they think the cells of the glitterball might look like, giving it the equivalent organelles that exist in terrestrial animal and plant cells.

They can use different colours than those traditionally used in cells, and if they rename the organelles they must explain what they are equivalent to and what its functions are. The cells need to be placed on A3 paper and labelled/described such as:



After completion they need to present their science fiction cells to the rest of the class, explaining the name of their organelles and what they equate to on Earth.

Extras

Other Ideas

Discuss the structural adaptations of some unicellular organisms (describing how the glitterball has adapted).
Students could describe adaptations of the glitterball itself.

Watch

Close Encounters of the Third Kind (Steven Spielberg, 1977)
E.T. the Extra-Terrestrial (Steven Spielberg, 1982)
The Day the Earth Stood Still (Robert Wise, 1951)
Superman (Richard Donner, 1978)

The Glitterball (Harley Cokeliss, 1977, Children's Film Foudation)

Alive or not alive?

Criteria	When in the film?	What evidence of the criterion is show?
Movement		
Reproduction		
Sensitivity		
Growth		
Respiration		
Excretion		
Nutrition		

Labelling your cell