

# MODULE: *Cells*

## Activity Sheet 1.1: Your brief

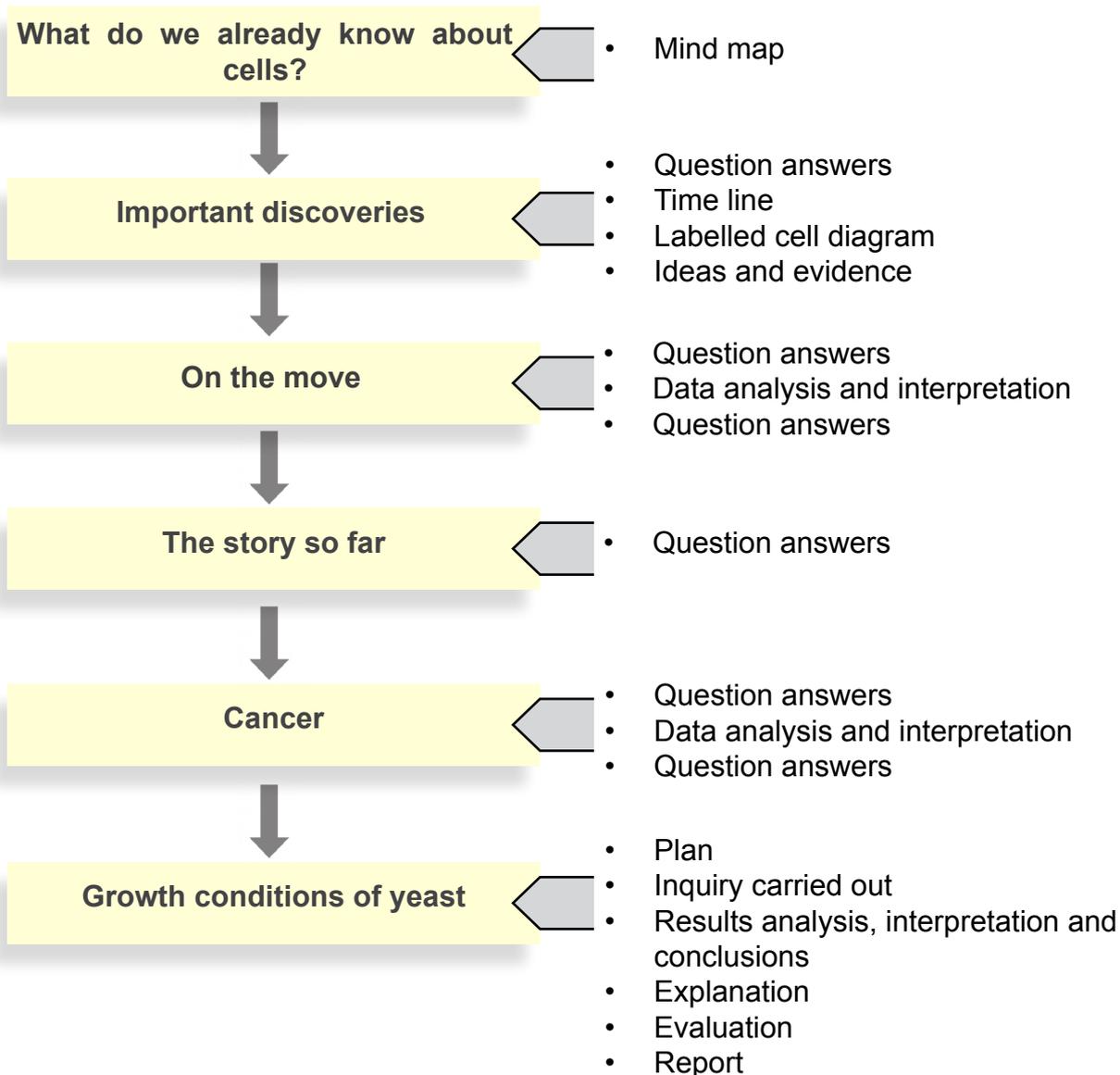
### Setting the scene

You are researchers working for the Caspimunaigas Company. Your head of research met an ex-colleague at a conference who is using yeast in his cancer research. He and his colleagues have commissioned Caspimunaigas to recommend the best conditions for growing yeast cells. Your team will carry out a scientific inquiry to identify the best growing conditions. You will produce a research poster to present your inquiry and recommendations to the client.

### Route through the Brief

### Outcome Checklist

You will plan and carry out a scientific enquiry to identify the best growth conditions for yeast. You will produce a research poster of your inquiry for the cancer researchers. In your poster you will include your recommendations and explain your recommendations.



# Memorandum

Caspimunaigas

From: Dr Sapar, Head of Research and Development

To: Caspimunaigas

Subject: Growing conditions for yeast

Date:

I have just returned from presenting a paper at a conference in the USA. At the conference I met a colleague I worked with when I was doing my post doc research. You will have heard of Professor Paul Nurse, who was recently awarded a Nobel Prize. I was telling Paul about our work in developing growth media for bacteria used in medical labs. He was telling me that his team are studying the growth of yeast as part of their research on cancer. He asked if we could carry out research to find the best conditions for growing yeast.

We have not worked with yeast cells before as we normally develop growth media for bacteria. I think it may be a good idea to refresh our background understanding about

- Cell structure and function
- Some of the discoveries that have led to our current understanding
- The chemicals needed by cells to grow and how they move in and out of cells

I also think it would be important for us to learn about the research that Paul, his team and other scientists have been carrying out, as well as what causes cancer.

I would then like you to carry out a scientific enquiry to find the best growing conditions for yeast. Paul asked if you could present the findings of your research and your recommendations through a research poster.

Your poster should include

- Research question
- Hypothesis
- Method
- Results (including tables and graphs)
- Discussion (analysis, interpretation and explanation of your results – and comparison of your results with those of other research)
- Conclusions
- Recommendations. These should be backed up with evidence from your enquiry

I look forward to viewing your posters.