

Hanukkah doughnuts: interpreting practical instructions

This resource is part of a collection of ideas and activities for chemistry lessons in the run up to the festive season. Find more at: rsc.li/3h40uXc.

Learning objectives

- 1 Interpret different forms for communicating practical instructions.
- 2 Convert practical methods between different forms.
- 3 Evaluate the advantages and disadvantages of different forms of practical instruction.

This activity presents three different forms of practical instruction for making Hannukah doughnuts, a festive treat common during this Jewish festival. The activity can be used in different ways depending on the desired learning objectives.

Students could complete a side-by-side analysis of the three forms, identifying advantages and disadvantages. They could take this further to improve on the forms provided. For example, they could combine elements of the different forms to produce optimal instructions for themselves or peers.

Alternatively, students could be provided with one or two of the forms, and then develop their own version of the third form. For example, one student could convert the traditional form into integrated instructions form, and the second student vice versa. By comparing the instructions they developed with the forms provided, they could evaluate the reliability of the methods they have produced.

Equipment

- Paper or electronic copies of the practical instruction forms.
- Paper/pen or electronic notebook to produce their own instructions.

Possible answers

Practical form	Advantages	Disadvantages
Recipe form	<ul style="list-style-type: none">• Concise• Quick to read	<ul style="list-style-type: none">• Relies on prior cookery knowledge• Doesn't identify all the equipment required
Science practical written form	<ul style="list-style-type: none">• Clear list of all ingredients and cookery equipment required• Detailed instructions of how to carry out each step	<ul style="list-style-type: none">• Assumes knowledge of how to use all the apparatus• A lot of information to interpret in one go
Integrated instructions form	<ul style="list-style-type: none">• Combines simplified written instructions with simple pictograms• Provides built-in checklist of each step• Movement of ingredients and apparatus clear show by arrows	<ul style="list-style-type: none">• A lot of information to interpret on first viewing• Flow of instructions is not consistent in this method• Instructions can take longer to develop initially