A selection of resources to start advanced Chemistry lessons for 14-18 year olds

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Foreword

Kristy graduated from the University of Bradford in 2002 with an MChem degree before taking up a PhD at the University of Glasgow. The promotion of her research supervisor meant a move to the University of Manchester in 2004 and in 2006 Kristy moved into secondary teaching through the Graduate Teacher Programme. Kristy has spent much of her teaching career in the state sector, teaching from 2006 until 2011 at Westhoughton High School in Bolton, an 11-18 community comprehensive school where she was promoted to Head of Chemistry. Kristy returned to the University of Manchester for her fellowship year 2011-12 and now teaches Chemistry at Bolton School Boys’ Division. She retains an honorary fellowship at the University of Manchester where she still participates in outreach and teaching and learning projects.

Catherine graduated from the University of Sheffield in 1998 with an MChem degree before moving to the University of Cambridge to undertake PhD studies in organic synthesis. Following postdoctoral work as a Junior Research Fellow at Girton College, Cambridge, Catherine moved into secondary teaching through the Graduate Teacher Programme. She has been teaching at John Cleveland College, a 14-19 high school in Hinckley, Leicestershire since 2006 and in 2009 was appointed an Advanced Skills Teacher working to improve teaching and learning across Leicestershire. Catherine spent her fellowship year at the University of Leicester and returned to teach at John Cleveland College in September 2012.

Introduction

This new collection of starters follows directly on from our previous edition and covers the more advanced syllabus areas. Again, our aim is to make planning 3 or 4 part lessons easy for teachers by providing a variety of short activities to help embed learning in the important skill areas of chemistry. We hope you enjoy using them in your lessons.

Kristy and Catherine

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4.6 Esters

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Carbonyl chemistry answers

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5.2 Industrially important molecules

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Aromatic chemistry answers

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Amines answers

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Structure determination answers

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Transition metal chemistry answers

14. Inorganics in aqueous solution

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14.3. Ligand substitution reactions
14.4. Inference from aqueous tests

Inorganics in aqueous solution answers