Subject: Mathematics

Introduction

Countless resources available online support the embedding of a Catholic perspective into lessons across a wide range of school subjects. Some of these resources explicitly mention the teachings of Jesus and refer to scripture but most draw on the rich tradition of Catholic Social Teaching simply by virtue of the subject matter involved, their fostering of particular values and encouragement of learners' consideration of various ethical standpoints, without overt reference to religion at all. Regardless, the integration of key principles of Catholic Social Teaching across the curriculum strengthens and underlines the religious life and identity of Catholic schools.

In these grids, resources for English, Geography, Mathematics and Science learners in P-10 have been selected and arranged according to year level. They have been drawn from, in the main, Caritas, the Global Education Project and the Edmund Rice Centre. The grid shows which principles of Catholic Social Teaching are reinforced by each resource, a brief overview of the activities and the Australian Curriculum content and skills that are incorporated therein.

After finding the phase of schooling in which they teach (Early Years, Lower Primary, Middle Primary, Upper Primary, Lower Secondary or Middle Secondary), users may select a learning area in the right-hand column and find suitable activities on that basis or, alternatively, decide on a principle of Catholic Social Teaching they would like to cover, and identify which learning areas might be supported through the activities suggested.

	Activity	Curriculum
	Lower Primary: F-2	
Global Education Project	**Stewardship:** **My place, your place** Students explore why it is important to have a home, and reflect on what is essential for adequate housing. They investigate different styles of housing around the world and develop an awareness of environmental, cultural and economic factors that influence the kinds of homes people have. • Activity 1: Our homes • Activity 2: Homes in our neighbourhood • Activity 3: Homes around the world • Activity 4: Helping children feel at home • Activity 5: We all need a home	Mathematics Foundation • Sort, describe and name familiar two-dimensional and three-dimensional objects in the environment (ACMMG009) Year 1 • Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features (ACMMG022) Year 2 • Interpret simple maps of familiar locations and identify the relative positions of key features (ACMMG044) • Describe and draw two-dimensional shapes, with and without digital technologies (ACMMG042)
	Upper Primary (5-6)	

	Human Dignity, Preferential Option for the Poor, Stewardship, Subsidiarity, Common Good: Access to safe water and sanitation Students deepen their understanding of the need and right of all people in the world to have access to safe water and adequate sanitation for health and wellbeing. They investigate projects and initiatives to improve access to water and sanitation for communities in need and explore the importance of community involvement in helping to achieve lasting change. • Activity 1: Spotlight on staying healthy • Activity 2: Water collection and use • Activity 3: Giving water a lift • Activity 4: Cleaning muddy water • Activity 5: Water safe to drink • Activity 6: Community-led total sanitation • Activity 7: Multimedia presentation • Related activities	Mathematics Year 5 • Choose appropriate units of measurement for length, area, volume, capacity and mass (ACMMG108) Year 6 • Connect volume and capacity and their units of measurement (ACMMG138) 
	Human Dignity, Participation, Common Good: Inclusion and opportunity Students learn about the Convention on the Rights of the Child and the Universal Declaration of Human Rights. They investigate the impact of unequal treatment or discrimination and examine ways of ensuring that everyone's rights are equally valued and protected. • Activity 1: Children's rights • Activity 2: Opportunities for girls • Activity 3: Right to participate • Activity 4: Equality and discrimination	Mathematics Year 5 • Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies (ACMNA100) • Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (ACMNA291) Year 6 • Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA123) 

	Human Dignity, Preferential Option for the Poor, Subsidiarity: Microfinance Students use mathematical skills to develop understanding of the poverty cycle and critically evaluate how borrowing to run a small business, microfinance, works. • Activity 1: Trapped in the poverty cycle • Activity 2: Operating a small business • Activity 3: Microfinance • Activity 4: Making microfinance multiply • Activity 5: Funding microfinance	Mathematics Year 5 • Use estimation and rounding to check the reasonableness of answers to calculations (ACMNA099) • Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies (ACMNA100) • Create simple financial plans (ACMNA106) Year 6 • Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA123) • Find a simple fraction of a quantity where the result is a whole number, with and without digital technologies (ACMNA127) • Multiply and divide decimals by powers of 10 (ACMNA130) • Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without digital technologies (ACMNA132)
	Lower Secondary (7-8)	
Global Education Project	**Preferential Option for the Poor, Solidarity, Human Dignity, Stewardship, Common Good: Measuring Millennium Development Goals progress** Students use real world data from the Millennium Development Goals targets and indicators to calculate fractions, decimals, percentages and ratios to determine progress. • Activity 1: What do the Millennium Development Goals measure? • Activity 2: Tracking the world's progress • Activity 3: Comparing progress in regions across the world • Activity 4: Evaluating progress	Mathematics Year 7 • Express one quantity as a fraction of another, with and without the use of digital technologies (ACMNA155) • Round decimals to a specified number of decimal places (ACMNA156) • Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157) • Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies (ACMNA158) Recognise and solve problems involving simple ratios (ACMNA173)