# Levels 7/8 Civics and Citizenship Activity

## Understanding the Preferential Voting System in Australia

### Introduction to Numeracy in Civics and Citizenship

Civics and citizenship education involves building a deep understanding of Australia’s federal system of government and the liberal democratic values that underpin it. Learning about civics and citizenship enables students to become active, informed, and critical citizens who can participate in and sustain Australia’s democracy in their local, national, and global contexts (Australian Curriculum, Assessment and Reporting Authority [ACARA], n.d.-a).

The Victorian Curriculum and Assessment Authority (n.d.) explains that learning about civics and citizenship helps students to develop skills to investigate contemporary civics and citizenship issues, participate responsibly in Australia’s democracy, and engage in the civic life of their nation. Students require skills and knowledge to make judgements, form conclusions, and develop plans for action. As Goos et al. (2019) argue:

Numeracy is vital for critical citizenship, because almost every public issue depends on data for constructing arguments to inform, persuade, or shape decision-making. The news, advertising, and entertainment media are a rich source of opportunities to ‘see’ numeracy in community and civic life, and to question the ways in which issues are represented or argued. (p. 13)

One aspect of civics and citizenship education is building students’ capacities to understand the electoral system, enrol and participate as voters, and make reasoned choices when they decide how to vote, all which involve numeracy skills. For example, students need to understand the mathematics involved in the preferential and proportional representation systems of voting. However, numeracy goes beyond mathematical content: Goos et al. (2010, 2014) emphasise broader aspects of numeracy in their Model for Numeracy in the Twenty-First Century. They argue that students must build values, dispositions, and personal and social capabilities related to numeracy, such as confidence in making decisions and problem solving.

Being a critical citizen and voter involves far more than just marking the ballot paper in a sequential order during elections. Rather, the voter needs to make judgements about policies and programs advocated by parties and members of parliament, before they choose for whom to vote. Being a critical citizen also involves some elements of chance, since the numerical order that the voter chooses on a ballet paper can impact who wins in both the preferential and proportional representation systems. So, students need to understand the political aspects of these systems and why ‘how to vote’ cards are provided by parties and independent candidates on election days.

Understanding contemporary issues that are crucial for critical citizenship often involves making sense of statistical information, graphs, or explanations that involve financial literacy; thus, citizens need to employ mathematics in everyday life. Hence, there are many opportunities for making connections between numeracy and Civics and Citizenship in the curriculum and in classroom teaching and learning.

### Developing Numeracy Understanding in Civics and Citizenship

Through the study of Civics and Citizenship, students develop skills of inquiry, as well as values and dispositions that enable them to be active and informed citizens, so that they can question, understand, and contribute to the world in which they live. Using the skills of interpreting and representing data in tables and graphs (e.g., about changes over time) can add to students’ understanding of issues in society. Students can explore trends using percentages or other numbers that illustrate change or continuity.

In the Civics and Citizenship curriculum, students have opportunities to investigate political and legal systems, and to explore the nature of citizenship, diversity, and identity in contemporary society. Using quantitative data can enrich students’ investigations. For example, students can explore changing percentages of immigrant arrivals over time, as well as the percentages of different ethnic or national groups, to draw conclusions about the changing nature of diversity and identity in Australian society.

Students can investigate the impact of British colonisation and lack of equity for citizens using population statistics and other data related to Aboriginal and Torres Strait Islander peoples’ lives in regions across Australia over time. Statistics can be used to build students’ understanding of the continuing disadvantage that First Nations’ peoples continue to suffer through, for example, analysis of First Nations’ peoples’ ongoing socio-economic disadvantage, illustrated by statistics about unemployment, health, deaths in custody, and incarceration rates. Since 2008, the stakeholders who made recommendations in the Close the Gap program have aimed to close the health and life expectancy gap between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians within a generation. The campaigners aim to show significant improvements in the health status of Aboriginal and Torres Strait Islander peoples by 2030. In the Close the Gap: Indigenous Health Campaign review (Human Rights Commission, 2021), policymakers examined why Australian governments had not succeeded in closing the health gap, and discussed why they will not succeed by 2030 if the current course continues. Students can conduct statistical analyses using data from this review and draw conclusions by analysing whether targets have been achieved.

The Civics and Citizenship curriculum includes developing understanding of how people, as citizens, choose their governments; how the system safeguards democracy by vesting people with civic rights and responsibilities; how laws and the legal system protect people’s rights; and how individuals and groups can influence civic life. Voting in elections is one way that citizens can engage in the democratic system and participate in Australia’s democracy, but in order for them to engage, numeracy skills are required. By developing these skills, students will be able to connect the mathematics learned at school with real-life situations such as voting that additionally involve problem solving, critical judgment, and making sense of the non-mathematical contexts.

In the explanation of numeracy in the Civics and Citizenship curriculum, ACARA (n.d.-b) states that students synthesise statistics and texts to communicate information and support conclusions about social, economic, and environmental issues. Furthermore, there are opportunities for students to learn to organise, interpret, analyse, and present information in numerical, tabular, and graphical forms about historical and civic events and developments to make meaning of the past and present.

## Lesson Plan: Understanding the Preferential Voting System in Australia

In this lesson, students develop the knowledge and skills to be able to participate as voters. They learn how to enrol to vote and come to understand how the preferential system of voting and counting works.

### Prerequisite/Corequisite Knowledge: Civics and Citizenship

Students need to have and/or develop the ability to:

* Understand that the Australian system of government is a representative democracy in which it is compulsory, as part of their civic responsibilities, for all Australian citizens over 18 years of age to participate through enrolling and voting for people to represent them.
* Recognise that there are three levels of government in Australia and that citizens vote to elect representatives to each of these levels: federal, state or territory, and local.   
  If students do not understand the functions and roles of the levels, they can visit <https://www.aec.gov.au/learn/three-levels.htm>

### Background Mathematical Skills and Understandings

Teachers of Civics and Citizenship are not expected to teach the mathematical knowledge and skills that students will draw on when engaging with this activity. The students will have learnt and should be adept with the required mathematical knowledge and skills to complete the activity. According to the Victorian Curriculum Mathematics, the required mathematical knowledge and skills should have been developed in earlier years of schooling, that is, by the end of Level 6.

For this activity, the background mathematical skills and knowledge are:

* Familiarity with the notion of chance
* Ability to order (by preference) and represent the order (from 1st to nth)
* Ability to sort, count, check answers (by re-counting), record, and tabulate results on a tally sheet
* Ability to identify inappropriate examples
* Ability to determine whether a number is greater than half of the total (i.e., a majority) with or without technology

N.B. Some students may not yet have encountered the procedure for expressing one number as a percentage of another (Level 7).

## Lesson Description

The aim of this lesson is for students to develop the knowledge and skills required to participate in the federal electoral system as voters, and elect their representative, which is a key role for citizens in a democracy. Students will use resources available on the Australian Electoral Commission website: <https://electorate.aec.gov.au/>. Students will explore the processes that young people experience in real life when preparing to be voters through enrolling to vote at age 18.

Students will then develop their understanding of the preferential system of voting. They will learn that voters in each electoral division elect one person to represent them in the House of Representatives (the lower house) in the federal government in Canberra. They will also come to understand how votes are counted in the preferential system. Students will learn that, as citizens, they require numeracy skills to complete their vote and to comprehend how their vote will be counted. Students will learn that contextual personal and social understandings about politics, political party policies, and the views of independent candidates can inform their voting choices. This understanding will help students to be critical citizens with the dispositions to participate in the democratic process of voting.

#### Teacher note

The teacher must ensure that all students have access to a device and connection to the internet as they need to access the Australian Electoral Commission website: <https://www.aec.gov.au/>

### **Activity 1.**

The first task is for students to find the electorate (or area represented by one member of parliament) where they live. (See <https://electorate.aec.gov.au/>). Each student will enter their criteria, then select by locality, postcode, or name of the suburb from the drop-down menu, and then click on the Search button from the drop-down menu. As an extension activity, or in another lesson, students can find out more about the current member who represents them and their local community in Canberra.

### **Activity 2.**

Second, students will visit <https://www.aec.gov.au/enrol/> to find out how they will be able to enrol to vote when they are 18. Students will discover they need to be an Australian citizen or an eligible British citizen.

### **Activity 3.**

The class will then discuss how a preferential voting system is used in the Australian federal elections for the House of Representatives (lower house). That is, voters are required to mark a preference for every candidate on the green ballot paper. The order of the candidates on the ballot paper for each electoral division is determined by a random draw conducted in the office of the Divisional Returning Officer immediately after the declaration of nominations. Students will access the following link to find out more about the draw: <https://www.aec.gov.au/voting/ballot-draw.htm>. The teacher should select one or two students to provide a summary of the process.

### **Activity 4.**

Next, students will learn how to complete a ballot paper. The teacher will explain that to vote for a member of the House of Representatives, a voter is required to write the number ‘1’ in the box next to the name of the candidate who is their first choice and the numbers ‘2’, ‘3’, and so on in the boxes next to the names of all the other candidates, until all the boxes have been numbered, in order of the voter’s preference. The teacher should also explain what informal votes and formal votes are.

**Informal Votes**

An informal ballot paper is one that has been incorrectly completed or not filled in at all. Informal votes are not counted for any candidate but are set aside.

A House of Representatives ballot paper is considered informal if:

* It is blank or unmarked,
* Ticks or crosses have been used,
* It has writing on it that identifies the voter,
* A number is repeated,
* The voter’s intention is not clear, and/or
* It has not received the official mark of the presiding officer and is therefore not considered authentic.

**Formal Votes**

To make a formal vote on a House of Representatives ballot paper, voters need to number every box with a series of consecutive numbers according to their preference.

Since polling officials at each polling station are available to assist voters in completing their ballot papers, the teacher should act as that official. If students make a mistake on a ballot paper, they may return it to the polling official who issued it and receive a fresh one.

### **Activity 5.**

Students then complete the practice vote, by being involved in a mock election. First, eight students will be asked to be the representatives of each of the political parties (with made-up names): the independent, sun, fog, humid, cloud, rain, frost, and breeze parties. The representatives should make up and state the reasons why they would be the best candidates.

The students will fill out a ballot paper online (<https://www.aec.gov.au/Voting/How_to_vote/practice/practice-house-of-reps.htm>), and then check if their vote would be counted. Once the students have voted, they should copy their ballot paper, using a snipping tool, and print their vote, or email their vote to the teacher to be printed.

### **Activity 6.**

This activity involves counting the votes in the mock election using the preferential system. The class will use the practice ballot papers that either they or the teacher will have printed. (The teacher will include several ‘informal’ votes in the pile in order to provide an experience of excluding votes.)

Since openness and transparency during the counting of votes shows that the election is fair, the teacher will ensure that they:

* Appoint student helpers to count or witness counting
* Ask an independent person(s) (i.e., a student) to count or witness counting
* Allow student helpers to double check by re-counting the votes

Students will then watch the video clip (4 minutes): Counting the votes – House of Representatives (<https://www.aec.gov.au/Voting/counting/vid_hor.htm>).

Students will follow the process that they have seen in the video, counting the class members’ (and teacher’s) votes to decide if there is a clear majority or whether a further vote count will be required. (If there is a clear majority, the teacher could add some further ballot papers that would change the result, but they should clearly explain to the class why they are doing this.)

The teacher should access the following two websites for clear visual steps for completing the count, and for a preferential voting downloadable tally sheet: <https://education.aec.gov.au/getvoting/content/step-five.html> <https://education.aec.gov.au/getvoting/content/instructions-counting.html>

Further text-based information with more complexity about counting the vote is available at: <https://www.aec.gov.au/Voting/counting/>

### **Activity 7**.

Declaration of the polls: Are the results declared on election night?

To answer this question, students will watch the ‘Declaration of the polls’ video (2 minutes) at <https://www.aec.gov.au/Voting/counting>.

Doing so helps students to understand the numeracy and broader questions involved in declaring the result. They will learn what an ‘indicative count’ of results is, and what the Australian Electoral Commission mathematical margins are before a legal declaration of results can be made, so that the candidate can take their seat as a member of the Federal parliament.

### **Activity 8.**

To conclude the lesson, students could be asked to reflect on and discuss with the class what they have learned about elections and voting in the preferential system. They could also be asked to draw some conclusions about what challenges they could encounter while voting if they did not have numeracy skills.

The next learning challenge could be for students to run a school election, by using the Get Voting resources from the Australian Electoral Commission website: <https://education.aec.gov.au/getvoting/content/resources.html>

## Table 1: Links to the Victorian Curriculum – Civics and Citizenship

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| Strand and Sub-Strand  (if applicable) | Content Description (Code) | Elaboration(s) |
| **Government and Democracy** | Explain how citizens can participate in Australia’s democracy, including use of the electoral system  (VCCCG011) | Considering the responsibilities of electors, such as enrolling to vote, being informed and voting responsibly |

## Table 2: Links to the 21st Century Numeracy Model (Goos et al., 2014)

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| Aspect of the Model | How This Aspect is Addressed by the Lesson |
| **Attention to Real-Life Contexts**   * Citizenship * Work * Personal and Social Life | In this lesson, students are involved in a real-life example of numeracy in a citizenship context. Since voting is compulsory in Australia, all students will be voters if they are Australian citizens aged 18 or over, or eligible British citizens. Many schools conduct elections for student representatives so that students learn about voting processes, but in this lesson, students’ understanding of the preferential system is developed through mock voting and counting procedures. |
| **Application of Mathematical Knowledge**   * Problem Solving * Estimation * Concepts * Skills | In the mock voting example, the students will see that voting is not simply a process of marking the boxes. It also involves making choices and problem solving, as students need to consider what their second and third preferences will be, in order to achieve the election of their preferred candidate. They will see that considering how they write the number order will ensure that the most preferred candidate is elected, rather than the candidate who wins a simple majority. |
| **Use of Tools**   * Physical * Representational * Digital | In this lesson, students will use the resources and tools available at the Australian Electoral Commission website in order to mediate and shape their thinking about how voting processes work. These include a mock example of completing a House of Representatives numbered ballot paper and counting the votes. |
| **Promotion of Positive Dispositions**   * Confidence * Flexibility * Initiative * Risk | If students develop understanding of compulsory voting, enrolling to vote, and are involved in modelled examples of how to vote and the process of vote counting (including the numeracy capabilities required to do so), they will develop positive dispositions to enrol and the confidence to fulfil their civic duty. If students understand the preferential system, including the mathematics underpinning it, and see they need to make informed choices based on taking the initiative to understand candidates’ policies to inform their voting choices, then they will become critical citizens. |
| **Critical Orientation**   * Interpreting Mathematical Results * Making Evidence-Based Judgements | Through participation in the voting process, students will learn that in order to achieve the election of their preferred candidate, they need to make sure that they mark the numbers on the ballot paper according to the party’s recommendations; alternatively, if they choose an independent candidate, then they need to put that candidate first. Students will realise that they need to be informed, active, and participatory citizens who make evidence-based judgements about their candidates’ worthiness to represent them in parliament based on their policies. |

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