

**Supplementary Table S2.** QR-linked didactic and informational resources used in the challenge cards.

| Challenge | Challenge title / topic          | Author / institution                                          | Title                                                          | Year | Resource type        | URL                                                                                                                                                                                               | Last access |
|-----------|----------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1         | Emergency kit                    | FEMA. Agencia Federal para el Manejo de Emergencias           | Lista de suministros de emergencias                            | 2021 | Text                 | <a href="https://www.ready.gov/es/kit">https://www.ready.gov/es/kit</a>                                                                                                                           | 11 May 2026 |
| 3         | Return period                    | Author-developed teaching material                            | Periodo de retorno                                             | 2025 | Text                 | <a href="https://drive.google.com/file/d/1Fb0ROPA1KG1Loy4Lyq8SwgaJUB40qipz/view?usp=drive_link">https://drive.google.com/file/d/1Fb0ROPA1KG1Loy4Lyq8SwgaJUB40qipz/view?usp=drive_link</a>         | 11 May 2026 |
| 4         | Resilience description and types | Author-developed teaching material                            | ¿Qué es la resiliencia?                                        | 2025 | Text                 | <a href="https://drive.google.com/file/d/1DZbC5MLkDqxV5-VGF_cmRRDLlQ1eHp4j/view?usp=drive_link">https://drive.google.com/file/d/1DZbC5MLkDqxV5-VGF_cmRRDLlQ1eHp4j/view?usp=drive_link</a>         | 11 May 2026 |
| 5         | Material attachment              | Author-developed teaching material                            | Apego a lo material                                            | 2025 | Text                 | <a href="https://drive.google.com/file/d/11HkOC5OVv5YU3mo-If0uKCbOUzmrAEbF/view?usp=drive_link">https://drive.google.com/file/d/11HkOC5OVv5YU3mo-If0uKCbOUzmrAEbF/view?usp=drive_link</a>         | 11 May 2026 |
| 6         | Self-protection against floods   | Salusplay                                                     | Voluntariado en zonas de catástrofes. Inundaciones             | 2024 | Infographic          | <a href="https://www.enferalicante.org/backoffice/2024/VOLUNTARIADO%20CATASTROFES-INUNDACIONES.pdf">https://www.enferalicante.org/backoffice/2024/VOLUNTARIADO%20CATASTROFES-INUNDACIONES.pdf</a> | 11 May 2026 |
| 7         | Flood map                        | Instituto Geográfico Nacional. Atlas Nacional de España       | Areas con riesgo potencial significativo de inundación         | 2015 | Map                  | <a href="https://drive.google.com/file/d/17pxtmWMalSKm2BaZV suejcRNjU9E0Ct/view?usp=drive_link">https://drive.google.com/file/d/17pxtmWMalSKm2BaZV suejcRNjU9E0Ct/view?usp=drive_link</a>         | 11 May 2026 |
| 8         | Measures to reduce flood risk    | Ministerio para la Transición Ecológica y el Reto Demográfico | ¿Cómo abordar los riesgos de inundación en el siglo XXI?       | 2019 | Video                | <a href="https://www.youtube.com/watch?v=4C-Hp9RXnQ4">https://www.youtube.com/watch?v=4C-Hp9RXnQ4</a>                                                                                             | 11 May 2026 |
| 9 and 12  | Tsunami information              | Author-developed teaching material                            | Curiosidades de los tsunamis                                   | 2025 | Text                 | <a href="https://drive.google.com/file/d/1O7SHAt2NUL3irLshdCWEDfyPGdjUqqmD/view?usp=drive_link">https://drive.google.com/file/d/1O7SHAt2NUL3irLshdCWEDfyPGdjUqqmD/view?usp=drive_link</a>         | 11 May 2026 |
| 10 and 11 | Tsunami information and risk map | Author-developed teaching material                            | Tsunamis                                                       | 2025 | Text                 | <a href="https://drive.google.com/file/d/1aC4swEu09NLtGlhjx1CFBN4DFNL4kSJ7/view?usp=drive_link">https://drive.google.com/file/d/1aC4swEu09NLtGlhjx1CFBN4DFNL4kSJ7/view?usp=drive_link</a>         | 11 May 2026 |
| 13        | Largest recorded tsunami         | Tiempos de leyenda                                            | El tsunami más descomunal jamás registrado: Lituya Bay, Alaska | 2024 | Video                | <a href="https://youtube.com/shorts/egTB37jCn gc">https://youtube.com/shorts/egTB37jCn gc</a>                                                                                                     | 11 May 2026 |
| 14 and 15 | First aid for heatstroke         | Gobierno de España. Ministerio de Sanidad                     | En verano protégete del calor                                  | 2024 | Infographic          | <a href="https://drive.google.com/file/d/1U9DY5Nt1wFoDgaS6FFMfJBsCe3aYjKdV/view?usp=drive_link">https://drive.google.com/file/d/1U9DY5Nt1wFoDgaS6FFMfJBsCe3aYjKdV/view?usp=drive_link</a>         | 11 May 2026 |
| 16        | Impacts of climate change        | Author-developed teaching material                            | Cambio climático                                               | 2025 | Text                 | <a href="https://drive.google.com/file/d/1N2jy6GnO4OzSHhsAuSqzuVixPB83s5ag/view?usp=drive_link">https://drive.google.com/file/d/1N2jy6GnO4OzSHhsAuSqzuVixPB83s5ag/view?usp=drive_link</a>         | 12 May 2026 |
| 17        | Volcanic hazards                 | Author-developed teaching material; 20 minutos Newspaper      | Peligros de los volcanes                                       | 2025 | Text and infographic | <a href="https://drive.google.com/file/d/1uN5zbFDAM8NxYg782Oz0kH0C0-udY9j9/view?usp=drive_link">https://drive.google.com/file/d/1uN5zbFDAM8NxYg782Oz0kH0C0-udY9j9/view?usp=drive_link</a>         | 12 May 2026 |

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| 18        | Types of volcanic eruptions              | Ecología Verde                                                    | Tipos de erupciones volcánicas (Definición y clasificación)           | 2023 | Video                     | <a href="https://www.youtube.com/watch?v=AJY4jnD_lyU">https://www.youtube.com/watch?v=AJY4jnD_lyU</a>                                                                                                                 | 12 May 2026 |
| 19        | Interactive volcano and earthquake map   | Volcano Discovery                                                 | Interactive Map of active volcanoes and recent earthquakes world-wide | n.d. | Interactive visualisation | <a href="https://earthquakes.volcanodiscovery.com/?L=8">https://earthquakes.volcanodiscovery.com/?L=8</a>                                                                                                             | 12 May 2026 |
| 20        | Earthquake map                           | Author-developed teaching material; Instituto Geográfico Nacional | Terremotos en España                                                  | 2025 | Text and map              | <a href="https://drive.google.com/file/d/1vp3d8ktuo4LwHPyqCobBR-2zhkyIS-aN/view?usp=drive_link">https://drive.google.com/file/d/1vp3d8ktuo4LwHPyqCobBR-2zhkyIS-aN/view?usp=drive_link</a>                             | 12 May 2026 |
| 21        | Information about earthquakes            | Author-developed teaching material                                | Terremoto                                                             | 2025 | Text                      | <a href="https://drive.google.com/file/d/1J--LPt7Esx-aAE0RiC-U8JjkR04NPYbW/view?usp=drive_link">https://drive.google.com/file/d/1J--LPt7Esx-aAE0RiC-U8JjkR04NPYbW/view?usp=drive_link</a>                             | 13 May 2026 |
| 22        | Seismogram                               | Author-developed teaching material                                | Sismograma                                                            | 2025 | Text                      | <a href="https://drive.google.com/file/d/1Qdctt5EgPIOCHFjKMRVS6iPYTgbVkrNJ/view?usp=drive_link">https://drive.google.com/file/d/1Qdctt5EgPIOCHFjKMRVS6iPYTgbVkrNJ/view?usp=drive_link</a>                             | 13 May 2026 |
| 23 and 24 | Seismic events                           | Author-developed teaching material                                | Réplicas y enjambres                                                  | 2025 | Text                      | <a href="https://drive.google.com/file/d/1r7dcm4f9Yu3UmmvbgWvtqrc-VZhMl2u0/view?usp=drive_link">https://drive.google.com/file/d/1r7dcm4f9Yu3UmmvbgWvtqrc-VZhMl2u0/view?usp=drive_link</a>                             | 13 May 2026 |
| 25        | Earthquake response protocols            | Gobierno de Navarra                                               | Qué hacer si hay un terremoto                                         | 2021 | Infographic               | <a href="https://drive.google.com/file/d/1Ak5C0Slmtf5H43lqM92zAKRoMjqxex7x/view?usp=drive_link">https://drive.google.com/file/d/1Ak5C0Slmtf5H43lqM92zAKRoMjqxex7x/view?usp=drive_link</a>                             | 13 May 2026 |
| 26        | Formation of earthquakes and tsunamis    | Instituto Geográfico Nacional                                     | Terremotos y maremotos. ¿Cómo se generan?                             | 2019 | Video                     | <a href="https://www.youtube.com/watch?v=W3Oz4aSMHfg">https://www.youtube.com/watch?v=W3Oz4aSMHfg</a>                                                                                                                 | 11 May 2026 |
| 27        | Wildfire map                             | Fundación Civio                                                   | Mapa de incendios forestales                                          | n.d. | Interactive visualisation | <a href="https://civio.es/medio-ambiente/mapa-de-incendios-forestales/#explora">https://civio.es/medio-ambiente/mapa-de-incendios-forestales/#explora</a>                                                             | 11 May 2026 |
| 28        | Wildfires                                | Wolters, C. National Geographic                                   | Incendios forestales: el cambio climático no es su única explicación  | 2025 | Web article               | <a href="https://www.nationalgeographic.es/medio-ambiente/incendios-forestales-como-empiezan-como-detenerlos">https://www.nationalgeographic.es/medio-ambiente/incendios-forestales-como-empiezan-como-detenerlos</a> | 13 May 2026 |
| 29        | Scenario: all volcanoes erupting at once | Qué pasaría si / What If Español                                  | ¿Qué pasaría si todos los volcanes hicieran erupción al mismo tiempo? | 2019 | Video                     | <a href="https://www.youtube.com/watch?v=ZeMniLbUxqc&amp;t=1s">https://www.youtube.com/watch?v=ZeMniLbUxqc&amp;t=1s</a>                                                                                               | 13 May 2026 |
| 30        | Volcanic lightning                       | Diario AS                                                         | Rayo impacta en volcán en erupción. Volcán de Fuego, Guatemala        | 2024 | Video                     | <a href="https://www.youtube.com/shorts/ZXe_wk3RNpU">https://www.youtube.com/shorts/ZXe_wk3RNpU</a>                                                                                                                   | 13 May 2026 |

**Note:** Resource titles are provided in their original language. The QR-linked materials include institutional, scientific, educational, and illustrative resources selected to support discussion and inquiry during the challenge-card activities. They were used as teaching resources rather than as primary evidence sources for the study.