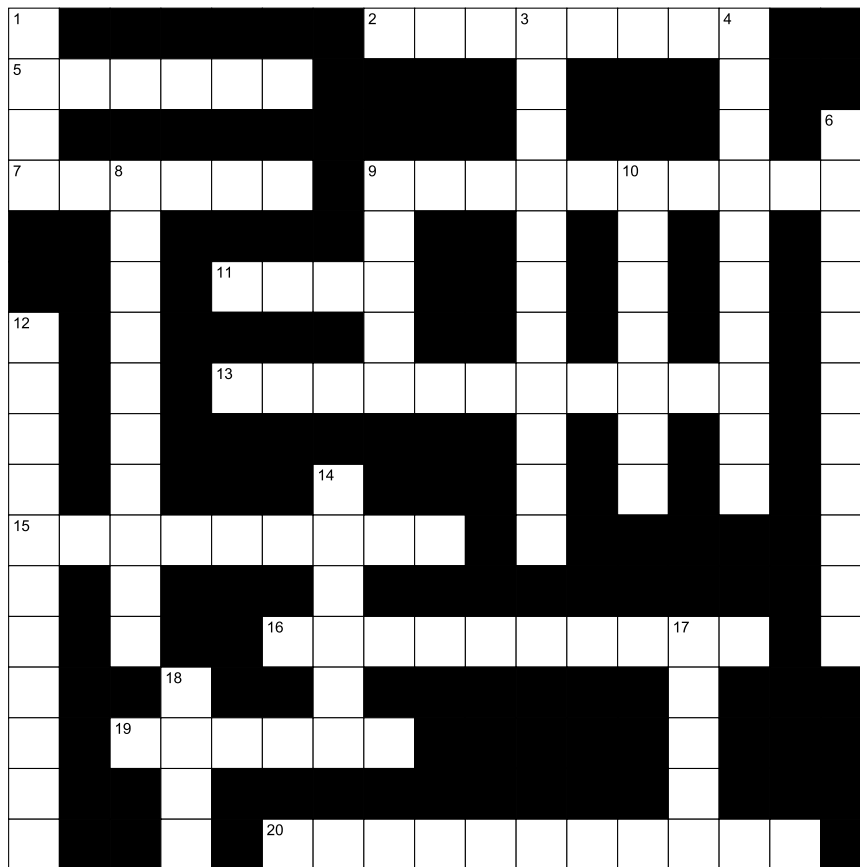


Kickoff challenge | Explore the proposal to find all 21 answers.

Name / team: _____



ACROSS

2. Alongside modular and maintainable, this describes the systems envisaged in outcome OC2. (8)
5. The E in the proposal's three categories of technical shortcomings. (6)
7. Cooling delivered at a distance from the cryogenic source. (6)
9. Type of modelling needed to move beyond costly trial-and-error development. (10)
11. Movement of helium used to transport cooling to a remote location. (4)
13. Deterioration of thermal contacts and electronic components during repeated cycling. (11)
15. Requirement for contacting switch surfaces that must be flat and parallel. (9)
16. The parasitic disturbances represented by V. (10)
19. Time an instrument remains operational, supported by dependable cooling. (6)
20. System quality compromised by bulky conventional thermal links. (11)

DOWN

1. Damage at contacting surfaces that limits component lifetime. (4)
3. Thermal property for which accurate predictive interface models are lacking. (11)
4. Thermal barrier that mechanical switches seek to minimise at the contact. (10)
6. The R threatened by repeated thermal cycling. (11)
8. Adjusting cooling power to match changing thermal requirements. (10)
9. Electrical input that should adapt to the cooling demand. (5)
10. Repeated cooling and warming used to assess component endurance. (7)
12. Capability needed to extend low-vibration cooling architectures to different system requirements. (11)
14. Working gas transported by the cryogenic circulator. (6)
17. Alongside low power, a key reduction named in PURECOOL's title. (5)
18. Four-letter abbreviation for the operational costs that PURECOOL aims to reduce. (4)