**L3 REVISION – MURIWAI COASTAL ZONE ENVIRONMENT – “I have, Who has?”**

**Students can be reluctant to ‘rote’ learn the key facts essential to be integrated into their essays in order to achieve Merit/Excellence. This revision game ensures students are reading, processing and hearing the key facts repeated over and over again. It requires whole class concentration & interaction**

* **Photocopy sheets on to card. Teacher keeps whole ‘master’ sheet for answer checking**
* **Cut sheets into strips horizontally across ie. Each strip has two halves – an “I have” and a “who has”**
* **Mix up and distribute around class. Students should get at least 2 to 3 strips**
* **The student with the smiley face on top left starts and reads the question “who has…”**
* **The student with the correct answer call out “I have” and reads out answer followed by second half of their strip “who has?”…etc etc.**
* **First round is slower as students process/establish correct answers**
* **Repeat a second time and try to go faster with no delays between questions and answers**

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|  | **WHO HAS?**  MURIWAI BEACH LOCATION |
| **I HAVE…**  42km NORTHWEST (West) of AUCKLAND city | **WHO HAS?**  The Muriwai Coastal Zone environment EXTENDS |
| **I HAVE…**  50 km from MURIWAI to KAIPARA SPIT | **WHO HAS?**  Our specific STUDY AREA covers a distance of… |
| **I HAVE…**  5 km from MAORI BAY to OKIRITOTO STREAM | **WHO HAS?**  GENERIC PROCESSES INCLUDE |
| **I HAVE…**  EROSION, TRANSPORTATION, DEPOSITION | **WHO HAS?**  The FETCH covers… |
| **I HAVE…**  2000km over TASMAN SEA | **WHO HAS?**  BEACH SLOPE at Muriwai is… |

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| **I HAVE…**  A SHALLOW GRADIENT of 1-5 degrees | **WHO HAS?**  DUNE HEIGHT is… |
| **I HAVE…**  4-10 m HIGH | **WHO HAS?**  HEADLAND is named |
| **I HAVE…**  OTAKAMIRO PT | **WHO HAS?**  STACK FEATURE is named |
| **I HAVE…**  MOTUTARA ISLAND | **WHO HAS?**  TIDAL RANGE is… |
| **I HAVE…**  3 m | **WHO HAS?**  SEDIMENT ENTRAINMENT occurs at |
| **I HAVE…**  5 m/sec or 11 knots | **WHO HAS?**  ONSHORE WINDS of 11 knots (5msec-1) occur… |
| **I HAVE…**  50% of time | **WHO HAS?**  PREVAILING WIND DIRECTION is… |
| **I HAVE…**  SW | **WHO HAS?**  AVERAGE WAVE HEIGHT is… |
| **I HAVE…**  1.5 m | **WHO HAS?**  WAVE SWELLS of at least 3 m occur… |
| **I HAVE…**  31% of time | **WHO HAS?**  LONGSHORE DRIFT carries |

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| **I HAVE…**  250,000 cubic metres of sediment per year | **WHO HAS?**  HIGH ENERGY WAVES have approximately… |
| **I HAVE…**  500,000 J/m-1 | **WHO HAS?**  BLACK SAND is also called… |
| **I HAVE…**  TITANOMAGNETITE | **WHO HAS?**  LIGHT GOLDEN SAND is called… |
| **I HAVE…**  FELDSPAR | **WHO HAS?**  A NATIVE GRASS species is… |
| **I HAVE…**  PINGAO | **WHO HAS?**  A GRASS WITH ‘RUNNERS’ is called… |
| **I HAVE…**  SPINIFEX | **WHO HAS?**  WAVE ACTION/EROSION sub-processes include… |
| **I HAVE…**  CORROSION & ABRASION | **WHO HAS?**  What general type of processes are  WAVE/ WATER PROCESSES? |
| **I HAVE…**  HYDROLOGICAL PROCESSES | **WHO HAS?**  PILLOW LAVA FORMATIONS are examples of.. |
| **I HAVE…**  GEOMORPHOLOGICAL features | **WHO HAS?**  WIND IS THE AGENT OF what processes… |
| **I HAVE…**  AEOLIAN PROCESSES | **WHO HAS?**  An ABNEY LEVEL or CLINOMETER measures |

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| **I HAVE…**  SLOPE ANGLE | **WHO HAS?**  WIND can be MEASURED with an… |
| **I HAVE…**  ANENOMETER | **WHO HAS?**  NATURAL PROCESSES ARE DEFINED AS ... |
| **I HAVE…**  A sequence of related actions that maintain or modify the environment | **WHO HAS?**  LANDFORM FEATURES ARE THE RESULT OF… |
| **I HAVE…**  INTERACTING NATURAL PROCESSES | **WHO HAS?**  MURIWAI HAS BEEN IN A MAINLY EROSIVE PHASE FOR… |
| **I HAVE…**  The PAST 2000 YEARS (but especially last 60yrs) | **WHO HAS?**  The HEADLAND HAS MOSTLY BEEN MODIFIED TO ITS CURRENT STRUCTURE IN |
| **I HAVE…**  The LAST 10,000 YRS |  |