ActivityC 4: Fieldwork activities - observing natural coastal processes at work

This is not intended to be an exhaustive list, but lists some suggestions for fieldwork activities.

1. Observing the effect of wind blowing over water.
    - Paddling pools, ponds and lakes may show waves developing as wind blows across the water.
    - Toy boats, leaves and rubbish may be blown along.
    - A portable weather vane can be used to confirm the wind direction.
2. Observing the effect of wave action back moving sand/pebbles up/down the beach.
    - Wave action smooths and rounds grains as they move up and down the beach and rub against each other.
3. Observing that waves hitting the coast at an oblique angle cause longshore drift.
    - Look out for sand piled up against groynes or rocky outcrops.
    - If groynes are present, check the height of the sand on either side of the groynes and work out in which direction the longshore drift process is moving the sand.
4. Observing tide action.
    - Note the rise and fall of the (incoming/outgoing) tide.
    - Link observations to local tide tables or the phase of the moon (full, new, waxing, and waning).
5. Observing wind action across a beach.
    - Strong winds blow sand along the beach at low levels. (*Safety note: This is best observed at a distance as windblown sand can be very painful on bare legs and dangerous for children, especially if blown into eyes)*
    - Evidence for such sandblasting can often be seen at the base of posts or shown on damaged painted surfaces.
6. Observing sea defences such as sea walls, promenades, large stone blocks.
    - The effectiveness of these defences can be seen on TV news during the winter when there are reports about effects of storm surges.
7. Observing and investigating coastal rock pools.
    - This activity should only take place as the tide is going out, as a rising tide can lead to rocky outcrops becoming cut off very quickly.
    - This activity should be supervised at all times, but pupils can spend time explore rock pools, catching and identifying the resident creatures.
    - Always remember to:
        - return all creatures to the place they were found
        - replace creatures exactly as they were found, particularly if rocks have been turned or moved in the search for the creatures.