A Right Royal Puzzle

Our maths wizards have been working their magic again. In honour of Her Majesty the Queen's 90th birthday, they've dreamt up a right royal puzzle for one's amusement.

It's made up of seven individual challenges, these range in difficulty from 1 through to 5 on the Enigma Rotor Scale.

The answer to each challenge is the name of a famous person from history. Once you have worked out the names, convert each into a single letter, using the same process for all of your answers. Unscramble these to find the seven lettered word that royally connects all the answers and solve the overall puzzle.

Good luck, get your thinking caps (or should that be crowns?) on. Answers will be published on Monday afternoon.

Question 1

Un-mix and then mix. What do you get?

- CLAY KESTREL
- CRYSTAL EEL
- CUBA SEACOAST
- CUBIC SEE
- JAM TOO, CUTIE
- LEWD GENOME
- P. E. PREP
- REOCCURS, WEATHERISES
- D. V. OAK
- JOULE MINCE

Question 2

We thought we had a nice idea for a teaser, but clearly had ambitions beyond our station so we had to railroad this one a little to make part four work. If you

have a well-trained eye you should be able to think of your own clue for part three, and then you'll be on track to provide the missing answer.

1. Count of Savoy (1178 – 1233)
2. King of England (1284 – 1327)
3. ???
4. Alexander (1743 - 1827)
5. King of Scots (1512 – 1542)

Question 3

The celebrity pseudonymiser is a way to generate aliases. Given a person's name think of someone famous with the same surname and use that person's first name, then think of someone famous with the same first name and use their surname. For example DAVID CAMERON might change to RHONA WALLIAMS (after Rhona Cameron and David Walliams), or JENNA COLEMAN might change to DAVID MARONEY (after David Coleman and Jenna Maroney).

A list of award winners was put through the celebrity pseudonymiser and the results are below:

- JOHNS OGOGO
- ULYSSES BONNEVILLE
- NATHANIEL PARGETTER
- MERRILEE CHAUCER
- BOONE REDFORD

What was Nathaniel Pargetter's award for?

Question 4

What comes next?

1. HJAFUW, JLCHWY, LNEJYA, NPGLAC, ?
2. F, S, Mn, Kr, ?
3. The Magician, The High Priestess, The Emperor, Strength, ?

Question 5

Many major events have happened in the Queen's lifetime. Here are some headlines which could have been seen in the last 90 years – but in encrypted form. Can you work out who is apparently behind the encryption?

- DJCJHGI KLHBAJ EGVKJK EFGNK BC OHBLGBC
- JPMGHP WBBB GOPBEGLJK - DJNHDJ WB BK CJM ABCD
- LHYDWJ IBJ BK GTTNBCLJP QBHKL KJEHJLGHY DJCJHGI NQ VC
- KMBLZJHIGCP MBCK LFJ QBHKL JVHNWBKBNC KNCD ENCLJKL
- JCDIGCP PJQJGL MJKL DJHSGCY BC MNHIP EVT QBCGI
- PHNVDFL ENCLBCVJK BC OHBLGBC'K FNLLJKL KVSSJH
- RJGC-EIGVPJ PVWGIBJH BK NWJHLFHNMC GK THJKBPJCL NQ FGBLB
- OHJGALFHNVDF BC DJCJLBEK: PNIIY LFJ KFJJT BK EINCJP
- TIVLN INKJK BLK KLGLVK GK G TIGCJL
- UVJJC JIBZGOJLF EJIJOHGLJK CBCJLBJLF OBHLFPGY

- ABCDEFGHIJKLMN

Question 6

This question comes in two parts.

1. The ultimate solution to the first part of this question is a single word.

The puzzle consists of a list of 29 words, plus an additional word (GRANT). Each of the 30 words can be paired with another word and this second set of 30 words are in alphabetical order.

To make things clearer, here's an example set of six words (these don't appear in the puzzle – we're just using them to explain how the puzzle works):

REVILED	PAGE	REVEL	FIELD	BULLOCK	PART

You might notice that three of these six words can be paired with names to get women who have won the Oscar for Best Actress (Geraldine Page, Sally Field and Sandra Bullock) and the other three words can be paired with words that you get from reversing their spelling ('reviled' pairs with 'deliver', 'revel' pairs with 'lever', 'part' pairs with 'trap'). Furthermore, note that these six paired words are in alphabetical order:

DELIVER	GERALDINE	LEVER	SALLY	SANDRA	TRAP
REVILED	PAGE	REVEL	FIELD	BULLOCK	PART

To solve the puzzle your first job is to find the set of paired words for the 30 words in the question (the 29 in the list plus the word GRANT) and to divide them up into five sets of six words, where each set represents a different method of pairing.
Since the paired words that go with the 29 in the list are alphabetically ordered, once you start to find pairs this will help you narrow down what the other pairs might be. However the word that pairs with GRANT does not appear in this list so you cannot infer where in the alphabet the answer might be. What is the paired word for GRANT?

The list reads from left to right, top to bottom:

HUNT	WALL	SPROUTS	SACRED	LAUGHTER
NODDING	ROBINSON	EAST	RATHER	BUSH
NANNY	CLOTHES	KIRK	KENNEDY	EYE
BOTHER	HOLLY	HILTON	GUINEA	CROSS
BLACK	BROOK	MISTER	WON	AMOS
SYNDROME	CORONATION	DOC	PACT	

2. What comes next in the following sequence?

I, II, I, –, II, I, –, III, I, II, III, II, IV, V, VI, IV, V, ?

To get the overall answer, combine the solutions to parts A and B in the obvious way.

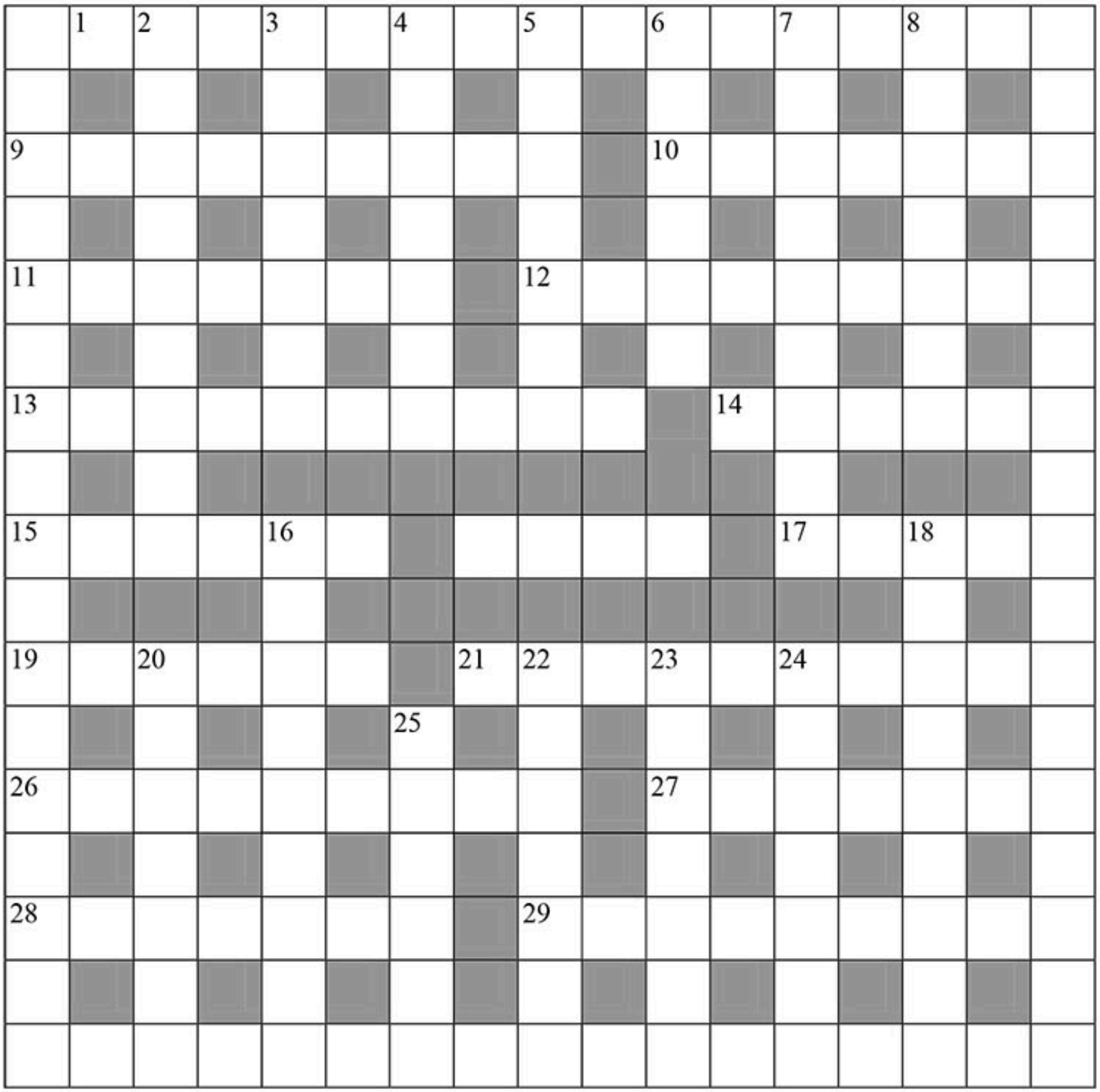
Question 7

This crossword celebrates 2d and 6d.

A phrase which links this event to this organisation (11, 7, 2, 4, 3, 6, 10, 3, 6, 7, 5, 4) runs clockwise around the perimeter, starting at square 1. Solvers are invited to complete the phrase in the central, unchecked squares.

The clues are not ordinary cryptic. Instead, each clue provides an overall definition of its solution. In addition, it contains an anagram of its solution + one extra letter contained somewhere within. These extra letters, in clue order, identify a character from history.

For example: You need this licence to imply some of these definitions! Gives, POETIC which is anagrammed in the underlined part, with the extra letter M. (ps: you have been warned!)



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Across

9. This does silence. (9)
10. Central heating in one's bed. (7)
11. Gull that half loves water. (7)
12. Voyager to a star in outer space. (9)
13. On most grounds, very tense. (10)
14. Act of simple mindlessness. (6)
15. Yankee with dang high reputation. (6)
17. What one did who goes early to bed. (5)

19. Takes its chances, stings you. (6)
21. Going beyond the present mood. (10)
26. Geodesic made it cross all the way over. (9)
27. London bridge, also heck of a football team. (7)
28. Listen to the ladies and gentlemen. (7)
29. Corsair, pirate, devil's shipmate. (9)

Down

2. Reign of purple blaze, the kind and gracious Queen. (9)
3. Impact is serious, not light. (7)
4. Prodder and tickler, end never comes. (7)
5. Keep using stamina-building foods. (7)
6. Anniversary gets attention you deserve. (6)
7. Raising of new Spanish lady. (9)
8. Glorious Last Rites, for example. (7)
16. Connect climes that are wet and windy. (9)
18. Caused when a bad timekeeper so loves his bed. (9)
20. Such as East Edinburgh? (7)
22. Where a manic clout puts me out? (7)
23. Feel, act, tailor one's touch. (7)
24. Much healthier than sugar on one's meal! (7)
25. Where Governor dispenses time. (6)

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