

Heavy pockets

1) Charlie would need to carry 6 coins. (1p's and 2p's)
1 1p coin and 5 2p coins.

$$1p = 1p$$

$$2p = 2p$$

$$3p = 1p + 2p$$

$$4p = 2p + 2p$$

$$5p = 2p + 2p + 1p$$

$$6p = 2p + 2p + 2p$$

$$7p = 2p + 2p + 2p + 1p$$

$$8p = 2p + 2p + 2p + 2p$$

$$9p = 2p + 2p + 2p + 2p + 1p$$

$$10p = 2p + 2p + 2p + 2p + 2p$$

Alison would need to carry around 5 coins. (4p's and 1p's)
3 1p coins and 2 4p coins.

$$1p = 1p$$

$$2p = 1p + 1p$$

$$3p = 1p + 1p + 1p$$

$$4p = 4p$$

$$5p = 4p + 1p$$

$$6p = 4p + 1p + 1p$$

$$7p = 4p + 1p + 1p + 1p$$

$$8p = 4p + 4p$$

$$9p = 4p + 4p + 1p$$

$$10p = 4p + 4p + 1p + 1p$$

If I had to choose 2 coin denominations I would either choose Alison's or use only 3p's and 1p's because both my way and Alison's ~~both~~ need you to carry around 5 coins.

3p's and 1p's

$$1p = 1p$$

$$2p = 1p + 1p$$

$$3p = 3p$$

$$4p = 3p + 1p$$

$$5p = 3p + 1p + 1p$$

$$6p = 3p + 3p$$

$$7p = 3p + 3p + 1p$$

$$8p = 3p + 3p + 1p + 1p$$

$$9p = 3p + 3p + 3p$$

$$10p = 3p + 3p + 3p + 1p$$

(3 3p's and 2 1p's)

How I would make all the ~~ma~~ amounts from 1p to £1.

I would have 10p's and 1p's because it means I'd carry the least amount of coins around. (10 10p's + 9 1p's)

1p = 1 1p
 2p = 2 1p's
 3p = 3 1p's
 4p = 4 1p's
 5p = 5 1p's
 6p = 6 1p's
 7p = 7 1p's
 8p = 8 1p's
 9p = 9 1p's
 10p = 1 10p
 11p = 1 10p + 1 1p
 12p = 1 10p + 2 1p's
 13p = 1 10p + 3 1p's
 14p = 1 10p + 4 1p's
 15p = 1 10p + 5 1p's
 16p = 1 10p + 6 1p's
 17p = 1 10p + 7 1p's
 18p = 1 10p + 8 1p's
 19p = 1 10p + 9 1p's
 20p = 2 10p's
 21p = 2 10p's + 1 1p
 22p = 2 10p's + 2 1p's
 23p = 2 10p's + 3 1p's
 24p = 2 10p's + 4 1p's
 25p = 2 10p's + 5 1p's
 26p = 2 10p's + 6 1p's
 27p = 2 10p's + 7 1p's
 28p = 2 10p's + 8 1p's
 29p = 2 10p's + 9 1p's
 30p = 3 10p's
 31p = 3 10p's + 1 1p

32p = 3 10p's + 2 1p's
 33p = 3 10p's + 3 1p's
 34p = 3 10p's + 4 1p's
 35p = 3 10p's + 5 1p's
 36p = 3 10p's + 6 1p's
 37p = 3 10p's + 7 1p's
 38p = 3 10p's + 8 1p's
 39p = 3 10p's + 9 1p's
 40p = 4 10p's
 41p = 4 10p's + 1 1p
 42p = 4 10p's + 2 1p's
 43p = 4 10p's + 3 1p's
 44p = 4 10p's + 4 1p's
 45p = 4 10p's + 5 1p's
 46p = 4 10p's + 6 1p's
 47p = 4 10p's + 7 1p's
 48p = 4 10p's + 8 1p's
 49p = 4 10p's + 9 1p's
 50p = 5 10p's
 51p = 5 10p's + 1 1p
 52p = 5 10p's + 2 1p's
 53p = 5 10p's + 3 1p's
 54p = 5 10p's + 4 1p's
 55p = 5 10p's + 5 1p's
 56p = 5 10p's + 6 1p's
 57p = 5 10p's + 7 1p's
 58p = 5 10p's + 8 1p's
 59p = 5 10p's + 9 1p's
 60p = 6 10p's
 61p = 6 10p's + 1 1p
 62p = 6 10p's + 2 1p's
 63p = 6 10p's + 3 1p's
 64p = 6 10p's + 4 1p's
 65p = 6 10p's + 5 1p's
 66p = 6 10p's + 6 1p's
 67p = 6 10p's + 7 1p's
 68p = 6 10p's + 8 1p's

69p = 6 10p's + 9 1p's
 70p = 7 10p's
 71p = 7 10p's + 1 1p
 72p = 7 10p's + 2 1p's
 73p = 7 10p's + 3 1p's
 74p = 7 10p's + 4 1p's
 75p = 7 10p's + 5 1p's
 76p = 7 10p's + 6 1p's
 77p = 7 10p's + 7 1p's
 78p = 7 10p's + 8 1p's
 79p = 7 10p's + 9 1p's
 80p = 8 10p's
 81p = 8 10p's + 1 1p
 82p = 8 10p's + 2 1p's
 83p = 8 10p's + 3 1p's
 84p = 8 10p's + 4 1p's
 85p = 8 10p's + 5 1p's
 86p = 8 10p's + 6 1p's
 87p = 8 10p's + 7 1p's
 88p = 8 10p's + 8 1p's
 89p = 8 10p's + 9 1p's
 90p = 9 10p's
 91p = 9 10p's + 1 1p
 92p = 9 10p's + 2 1p's
 93p = 9 10p's + 3 1p's
 94p = 9 10p's + 4 1p's
 95p = 9 10p's + 5 1p's
 96p = 9 10p's + 6 1p's
 97p = 9 10p's + 7 1p's
 98p = 9 10p's + 8 1p's
 99p = 9 10p's + 9 1p's
 100p = 10 10p's